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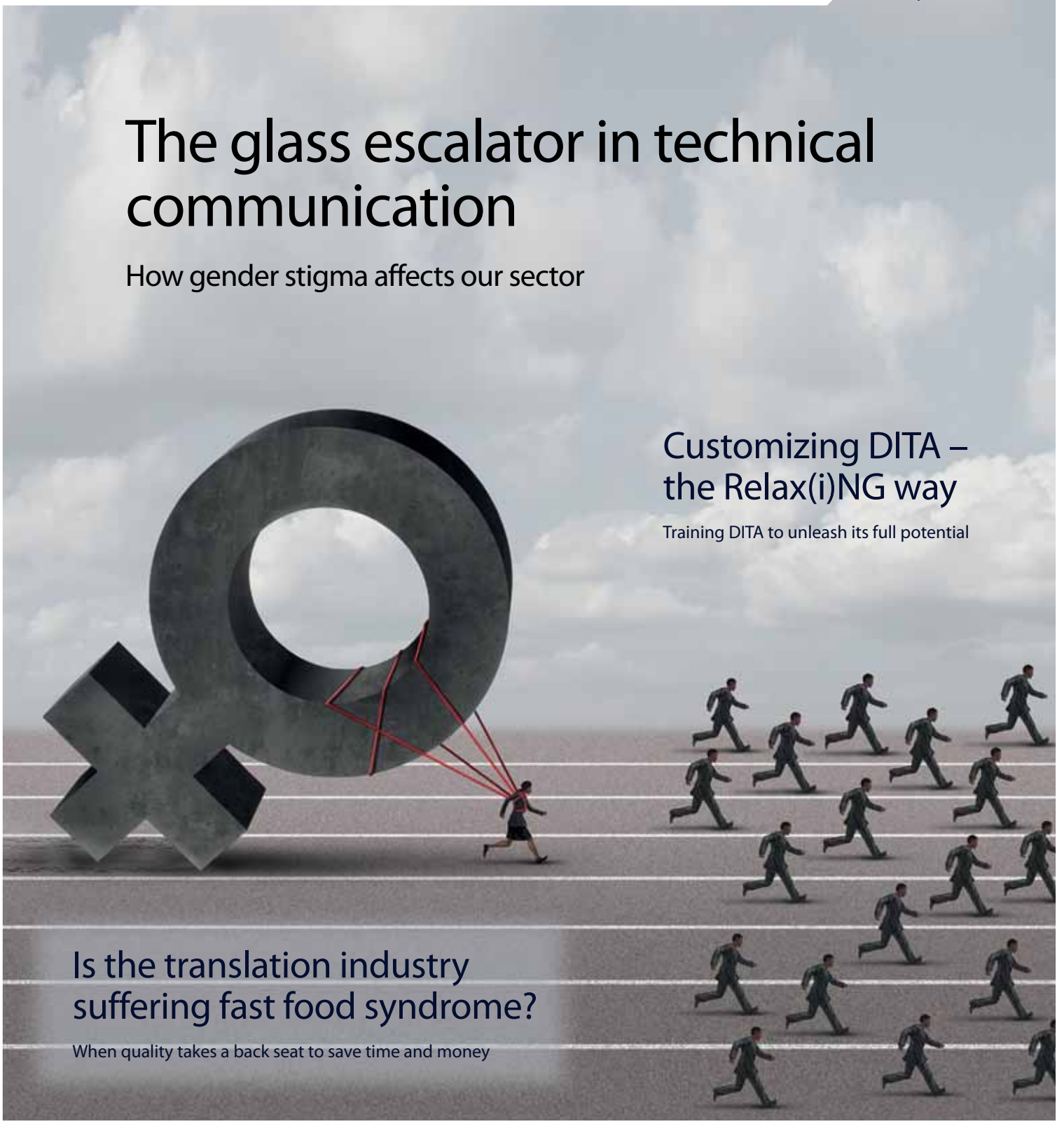

## The glass escalator in technical communication

How gender stigma affects our sector

## Customizing DITA – the Relax(i)NG way

Training DITA to unleash its full potential

## Is the translation industry suffering fast food syndrome?

When quality takes a back seat to save time and money

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**From the editor**

## The glass escalator

For the greatest part of our civilization, women wanting to enter the workforce stood in front of closed doors. It wasn't until the last century that the doors opened and female workers started to enter – then flood – the labor market. Soon women would receive equal access to education and just as many females as males would complete their studies with a university degree. The way was paved to allow women equal access to the professional market, from labor positions right through to higher-ranking managerial roles.

But then we hit the glass ceiling. The term was first coined by several high-achieving women to put a name to the unseen barrier that kept us from rising into senior-level management. Described as an "invisible, covert, and unspoken phenomenon", the ceiling continues to impede women from entering top positions. This is revealed clearly by the 2018 *Fortune 500 companies* list, where only 25 companies – a mere 5 percent – had female CEOs.

Today, women aiming for superior positions must contend with yet another obstacle: the so-called glass escalator. While female professionals in many sectors climb the ladder in a resilient step-by-step approach, their male colleagues glide past them as if on an invisible escalator. The glass escalator has the strongest effect in female-dominated sectors, such as teaching or nursing, where men are offered promotions more frequently and are more likely to achieve senior roles, for example a principal's position.

Unfortunately, the technical communication sector has not been spared the glass escalator phenomenon. Many argue that women voluntarily choose to put their family life first and sacrifice their careers for a better work-life balance. More flexible work arrangements could already make a difference in encouraging women to develop their potential and pursue their professional ambitions. But even beyond statistics, the stigma is still deeply entrenched in our industry, as you will discover in the respective article by our author J. White (page 12).

We hope that we can spark the discussion on gender equality and raise awareness regarding women's positions in the field of technical communication.

C. Melville

Corinna Melville

## Women in the tech sector

The statistics draw an alarming picture: Women in the tech sector are often paid lower wages compared to their male colleagues and are starkly underrepresented in managerial positions. But the gender gap reaches well beyond the statistics.

page 12

## Customizing DITA – the Relax(i)NG way

DITA was designed to cater to a large range of content domains. But the standard needs to be customized to fully match your requirements.

page 20

## Is the translation industry suffering fast food syndrome?

As the volume of content to be translated increases, quality has become a negotiable factor – often taking a back seat to speed and cost. It is time we start talking about quality standards to protect the profession.

page 34

# The future of content

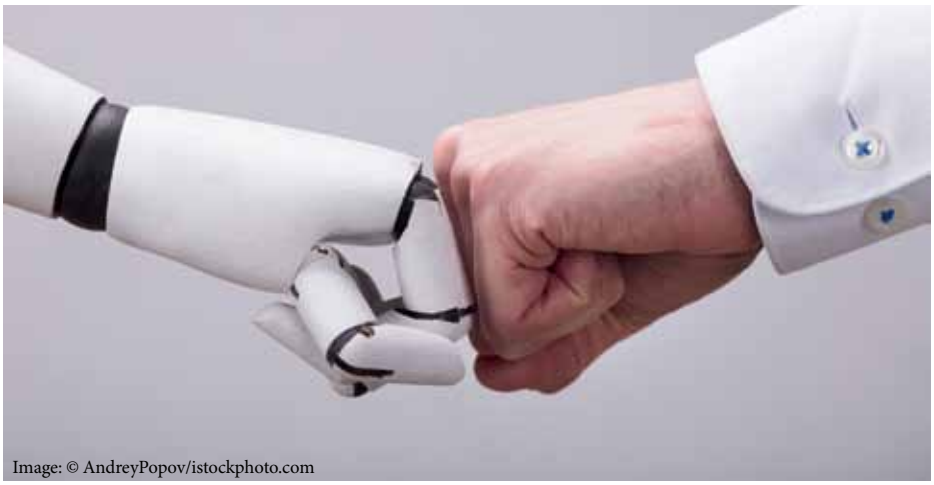
Image: © AndreyPopov/istockphoto.com

Translation and content management provider SDL is calling on brands to rethink their content strategies and prepare for a digital future, where content supply chains are autonomous – machine-first and human-optimized – for greater impact with worldwide audiences, across any language and device.

Companies are struggling to handle the growing volume and velocity of content required to engage with global audiences. And it's expected to get worse: According to an SDL report, 93 percent say the content they produce will increase in the next two years. SDL's *Enabling the Future States of Content* report addresses these challenges, offering insights on how companies can move towards an autonomous content supply chain of the future.

"Engaging with customers globally requires content, and lots of it. This content all needs to be tailored for different channels, devices – and of course languages," explains Peggy Chen, CMO, SDL. "If brands want to stay ahead, they're going to have to build autonomy into their supply chain, remove those mundane manual processes and make humans and machines work together to deliver more personalized experiences – at scale."

Offering strategies and technical insights across the creation, translation and delivery stages of the content supply chain, the report suggests that the future content supply chain relies on Linguistic AI, a technology that helps to understand, transform and create content in any language. The report has been developed based on SDL's experience of working with 90 of the globe's top 100 brands and over 25 years' leadership and innovation in content management and language solutions.

## CREATE: Connect content repositories to linguistic AI

Many organizations continue to approach content from a quantity perspective, spending an inordinate amount of time generating content. Because of the difficulty in crafting a message, visualizing it, and delivering it to the appropriate channels, this content is rarely individually tailored. Although companies strive to deliver relevant and personalized messages, for the most part, many can only hope the right content attracts the right person on the right channel at the right moment.

A content supply chain of the future will make content more usable regardless of where it is created or stored. Similarly, multiple AIs – narrowly focused on specific business problems – will solve complex content problems, connecting an answer with an in-the-moment customer question. Linguistic AI will make content available immediately.

## TRANSLATE: Machines should manage the translation process

Currently, humans decide what needs to be translated, who translates it, and how it is translated. This, alongside a multitude of other decisions, slows down the translation process considerably. The supply chain of the future will take a machine-first translation approach, streamlining many of these bottlenecks through Linguistic AI. It will analyze the impact of content and determine whether it merits human involvement, initiating handoffs between content management and translation management systems.

Linguistic AIs will pre-translate the content using neural machine translation (NMT), retrieve useful complementary texts, contact linguists and send them a translation kit. The human linguists who edit the pre-translation will then improve future machine translations as the AI learns from their edits.

## DELIVER: Content is no longer created; it should be synthesized

Content drives the digital experience – whether created by an organization's employees or by customers. Content is also data, which breathes life into AI. In many cases, organizations sit on a mountain of valuable internal data that is hardly touched. While we may be producing more content than ever before, every person is limited in how much content they can actually consume. At a certain point, humans can only read, watch, and listen to so much. What matters is relevance.

An autonomous content supply chain of the future will synthesize content on demand, rather than just delivering more content. This synthesized content will be derived by combining internal content data and customer data. Linguistic AIs will make it easy to identify the intent of the human seeking information, connecting them with the appropriate content for more significant impact than ever before.

www.sdl.com

# EU invests in a digital platform for suppliers of MT

KantanMT has launched the platform MT-Hub.eu, which is now openly available. The code for this new technology platform is currently available to the Open Source Community at github.com/iADAATPA under the GNU General Purpose License v3.0. The platform contains the following major technologies:

- Automatic domain detection and translation request routing Language detection
- RESTful SDK (software development kit)
- Synchronous and asynchronous translation capabilities
- Marketplace for MT vendors to provide domain-specific and generic engines to public administration bodies
- A range of CAT connectors for: SDL Trados, MateCAT, Drupal, OmegaT, OpenCMS, browser plugins.

The platform was funded by the European Commission's Innovation and Networks Executive Agency (INEA) under the Connecting European Facility (CEF). This is the largest financial investment the INEA and CEF have provided MT technologies. It is acknowledged as a milestone investment in the future of Neural MT for the European Union.

The CEF is a key EU funding instrument to promote growth, jobs and competitiveness through targeted infrastructure investment across Europe. MT-Hub.eu is seen as a textbook example of what CEF seeks to achieve in the provision of EU-wide digital services.

MT-Hub.eu is designed to accelerate connectivity across Europe, improve access to digital services, facilitate interoperability between digital services, and link national infrastructure to the existing core MT@EC automated translation platform.

"MT-Hub provides intelligent translation routing to multiple MT suppliers throughout Europe using both domain and language recognition," said Professor Andy Way, deputy director of the Dublin-based ADAPT Centre.

One of the key mandates of the CEF is to support the development of high-performing, sustainable and efficiently interconnected communications in the fields of energy, transport and digital services. MT-Hub.eu has opened a possible stream of work for many suppliers of machine translation throughout the EU.

The partnership team was made up of Pangeanic, KantanMT, Prompsit, Tilde, Everis and DCU, with support from public administrations in Spain (Segittur and SESIAD).

www.MT-Hub.eu

Image: © loops7/istockphoto.com

**THE LINGUISTIC CHALLENGES TO EBOLA PREVENTION**

Translators without Borders (TWB) found that people in Goma, Democratic Republic of the Congo (DRC) do not fully understand Ebola-prevention messages in French or standard Swahili. Responders should use the local form of Swahili in their Ebola-related communications in Goma to ensure people have the information they need to keep themselves and their families safe.

TWB conducted the rapid language needs assessment in February 2019 in Goma, North Kivu Province. TWB also discussed communication challenges in the Ebola response with humanitarian actors, government officials, civil society leaders, and academics.

Highlights and recommendations include:

- Risk communication materials for the Ebola response are not fully understood in Goma, particularly by women and older people.
- Information on Ebola is best understood in local Swahili in Goma, rather than in standard Swahili or French.
- Seemingly basic words like "bloody" in French or "vaccine" in Swahili were not well understood.
- Responding agencies should develop information materials in plain language and prioritize audio communication. TWB plans to conduct similar assessments in other at-risk and affected areas in DRC. The organization will use the findings to help responders break the Ebola transmission chain by communicating more effectively with people in areas at risk of Ebola.

Because language use varies between locations, TWB urges responders to test comprehension and communication preferences in other areas affected by or at risk of Ebola.

https://translatorswithoutborders.org

# AI to take over eighty percent of project management tasks


Image: © AndreyPopov/istockphoto.com

By 2030, 80 percent of the work of today's project management (PM) discipline will be eliminated as Artificial Intelligence (AI) takes on traditional PM functions such as data collection, tracking and reporting, according to Gartner, Inc.

"AI is going to revolutionize how program and portfolio management (PPM) leaders leverage technology to support their business goals," said Daniel Stang, research vice president at Gartner. "Right now, the tools available to them do not meet the requirements of digital business."

## Evolution of PPM market

Providers in today's PPM software market are behind in enabling a fully digital program management office (PMO), but Gartner predicts AI-enabled PPM will begin to surface in the market sometime this year. The market will focus first on providing incremental user experience benefits to individual PM professionals, and later will help them to become better planners and managers. In fact, by 2023, technology providers focused on AI, Virtual Reality (VR) and digital platforms will disrupt the PPM market and cause a clear response by traditional providers.

## PPM as an AI-enabled discipline

Data collection, analysis and reporting are a large proportion of the PPM discipline. AI will improve the outcomes of these tasks, including the ability to analyze data faster than humans and using those results to improve overall performance. As these standard tasks start to be replaced, PPM leaders will look to staff their teams with those who can manage the demands of AI and smart machines as new stakeholders.

"Using conversational AI and chatbots, PPM and PMO leaders can begin to use their voices to query a PPM software system and issue commands, rather than using their keyboard and mouse," said Mr. Stang. "As AI begins to take root in the PPM software market, those PMOs that choose to embrace the technology will see a reduction in the occurrence of unforeseen project issues and risks associated with human error."

Gartner clients can read more in the report: "How AI Will Reinvent Program and Portfolio Management."

www.gartner.com

### NEURAL MT FOR ENGLISH-IRISH

KantanMT has released a Neural Machine Translation (NMT) engine for the language combinations of English<=>Irish (Gaeilge) and Irish<=>English. The advanced NMT engines can be used for translating Irish government legislative texts. This move by KantanMT brings together the complex grammatical structure of an ancient language and the technology of the ultra-modern Artificial Intelligence KantanMT platform.

www.kantanmt.com

### DRIVING DIGITAL TRANSFORMATION

Too few CMOs are involved in digital transformation: According to research by Forrester, less than a quarter of CMOs are directly responsible for leading their firm's digital transformation strategy and only 16 percent are leading its execution. To be successful in driving digital transformation, Forrester's Thomas Husson believes CMOs must turn their company's brand values into a call to action for employees and work closely with HR and IT to manifest the brand.

www.lionbridge.com

### THE BEST GLOBAL WEBSITES OF 2019

For the second year in a row, Wikipedia was named the best global website, according to the 15th edition of the *Web Globalization Report Card*. The online encyclopedia was followed by Google, Nivea, Microsoft, Ikea and Adobe. For 2019, Byte Level Research studied 150 websites across 15 industry categories. Websites were graded according to languages supported, global navigation, global and mobile website architecture, and localization.

www.bytelevel.com

# Dive right in: Learning as a way of life

Text by Leah Guren

A few months ago, I sat in a meeting with a potential new client. The company asked me to do a job for them, for which I had no prior experience. While trying to keep a neutral face, I realized that I only had the vaguest idea of what they wanted me to do. In mere seconds, an internal debate passed through my mind: Should I allow my lack of experience to keep me from participating in this project? On the one hand, I would need to invest my own time and resources to get up to speed. On the other hand, I already had skills and knowledge that would be useful to them (and which all other team members lacked). I quickly decided to trust my ability to learn. When the meeting ended, I spent the rest of the day doing research to confirm that yes, I could learn this and deliver what they needed. Only later did it occur to me that I would have once disqualified myself from consideration due to my lack of experience, therefore missing out on an excellent opportunity.

## Learn or die

TC is a profession that requires constant learning. If you are documenting anything technical, you are almost always facing new technologies, product advancements, and sometimes changes so radical that they require a paradigm shift. The tools we use change, sometimes more frequently than we want. The world around us, including our users, continues to change at an accelerated rate. In short, this is not a profession for those who dislike learning.

Image: © egal/istockphoto.com

Those who do well are those who embrace ongoing education. They enjoy the challenge and the intellectual stimulation that comes from learning new information. They take pleasure in mastering new skills. The job is therefore never boring.

Much has been said about the connection between continuous learning and keeping the brain "fit". While the medical community cannot agree on the causes of senility (including Alzheimer's, etc.), there is consensus that learning something challenging reduces the risks. For those of us in TC, we reap the benefits of constant intellectual stimulation simply by doing our job.

## What are you afraid of?

Do you feel nervous at attempting something new? Are you afraid of failure or of looking foolish to your boss or peers?

More people today are aware of Impostor Syndrome, in which thoroughly qualified individuals fear being exposed as frauds. The phenomenon was first introduced in 1978 by Drs. Pauline Clance and Suzanne Imes in their article, "The Impostor Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention." [1] Despite how well-known this phenomenon is, people cannot seem to easily dismiss these thoughts. Capable, intelligent people convince themselves that they know nothing and are faking their way through their careers. Women seem to experience this more than men, but the syndrome is common among our male colleagues as well.

For most of us, it helps to know that this is normal. In fact, chances are that if you are having these thoughts, you are probably a rational, competent person. Only the most egotistical among us could start a new career or venture without the slightest twinge of self-doubt.

However, it may also be helpful to identify the source of your fear. What is really holding you back?

Ask yourself:

- What will really happen if I fail? Will I die? Lose my job? Be cast out of society? (Of course not.)
- What have I learned before? (Many, many things.)
- Compared to others around me, how good am I at learning new things? (You probably did very well in school.)

You may discover that your fear is not due to any inexperience but rather an imagined secondary outcome.

So, what is the best way to overcome Impostor Syndrome? The old adage "Fake it 'til you make it" may sound silly, but psychologists assure us that it really works. [2] Doing something with at least an outward appearance of confidence tends to develop into real confidence as we gain practice in the skills or knowledge expected, and doing something while showing fear or uncertainty undermines our brain's ability to adaptively learn. So, by all means, take a deep breath and dive right in!

## Know when (and how) to ask for help

There is a big difference between doing a quick weekend tutorial to get up to speed on a new software application and faking your knowledge about something with serious legal, regulatory, or safety ramifications. In some instances, fake pilots were flying for major airlines and getting away with it for years. [3]

We certainly aren't suggesting that you try something that insane! But there are plenty of soft skills that you can develop with no risk to yourself or others. These include productivity tricks, presentation skills, collaborative editing, and more.

When possible, rely on your own research. But there are ways of asking for help that will not undermine your own position or damage your credibility:

- Work closely with internal groups who may have more knowledge in this area.
- Don't be afraid to say that, while you may be familiar with the concepts and issues, this is not your area of expertise.
- Ask if there are templates or examples that they prefer.
- Find a colleague outside of your organization who can mentor you.
- Always ask about internal information, for example, who runs what part of a project, the roles and responsibilities, the client's proposed timeline for the project, etc.
- Ask your peers. Professional groups (including tekom) are good places to get help and guidance.

## Take the time for self-reflection

Once you have decided to take on a new challenge, dive right in and try to learn as you go. Bear in mind that there is no guarantee that the experience will be completely successful. But it is still an opportunity to learn and grow, as long as you take the time to review what went wrong (and what went right) during the process.

The goal is not to automatically know everything; it is to improve your ability to assess a situation, determine what you can learn, and absorb new information quickly and effectively.

There is also no guarantee that you will love the subject. Many years ago, I had a client who wanted me to train staff on several software tools. I had never taught tools before, and put myself through a crash course to make sure that I understood the ins and outs of the software. I managed to learn enough to get by, but in the process, I discovered that I hate software training. For whatever reason, it did not spark my normal enthusiasm. I found it tedious and unrewarding, and I am sure that I was a merely adequate trainer, rather than a very good one. Do I regret taking on the challenge? Certainly not! For one thing, it forced me to fill some obvious knowledge gaps with the tool. But more importantly, it gave me clarity about what I truly love and what I hate! Now, when clients ask me to teach tools, I cheerfully hand them over to a colleague who is an expert software trainer.

## Conclusion

Don't forget that two of the most important people in your life were novices when they first undertook a massively complex job requiring advanced skills and competencies — that is, your parents!

Do you have a trick to share for overcoming your fears? Let us know!

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[1] Clance, Pauline R.; Imes, Suzanne A. (Fall 1978). "The Impostor Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention". Psychotherapy Theory, Research and Practice. 15 (3): 241–247

[2] McCorquodale, Amanda. 8 "Fake It 'til You Make It Strategies Backed by Science", 02 Feb 2016 (http://mentalfloss.com/article/74310/8-fake-it-til-you-make-it-strategies-backed-science).

[3] India Uncovers Fake Pilots (www.globaltravelerusa.com/newsletter/volume-4-issue-17-2/)


### ABOUT THE AUTHOR


Leah Guren is the owner/operator of Cow TC. She has been active in the field of technical communication since 1980 as a writer, manager, Help author, and usability consultant. She now devotes her time to consulting and teaching courses and seminars in technical communication, primarily in Israel and Europe.

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# Women in the tech sector

The statistics leave no doubt: Women are still underrepresented in the tech sector, particularly in managerial roles. To make matters worse, they quite often take on management tasks without being paid or acknowledged for them.

Image: © Halfpoint/istockphoto.com

Text by J. White

If you type the words "women" and "tech" into a search engine, you will most likely end up with a variety of articles or research papers on the improvements being made in the sector or the way in which women are still lagging behind their male counterparts. These articles and papers are almost always decontextualized and consist of a plethora of statistics, graphs, arrows and stylized gender icons. The gender icons will usually show multiple rows of male icons in trousers and then one or two – or sometimes two and a half – female icons in dresses tacked onto the end, to indicate the female element within the sector. Depending on your point of view, these statistics can be read as depressing, or as an "encouraging start". Some might even interpret these few female icons as frightening harbingers of a legion of Valkyrie-like women just waiting to descend, take over and ruin the sector.

## Still a man's world

For me, as a woman working in technology, the articles and statistics provide a rough picture I clearly recognize. When I read articles on women in tech, I read the statistics, observe the trends and say "Yes, I recognize the broad validity of what is displayed here."

What I barely recognize, however, are the shiny press releases or classy web pages produced by the companies themselves, aimed at displaying a brave new world in which women in power suits shake hands over boardroom deals with their male counterparts. Granted, in most large tech companies you can find some of these women. However, the fact that even today you can count them on one hand indicates more than the fancy power suit and refined rhetoric, in terms of the reality that women face in this sector. And that reality is: Women in the tech sector, and particularly in

management roles, are such an anomaly as to be statistically irrelevant.

I recently had coffee with a former female colleague, who had just retired from a large tech company after over 40 years of service. I asked her how things had been back in the 1970s and how things had changed during her time with the company. She explained that as the only female in her whole graduating class, she had always been aware that she was the odd one out and that sexist comments, lower pay and limited promotional opportunities were par for the course. She noted that, over time, things had changed – not really in terms of increased opportunities, but rather with a growing awareness among male colleagues and management in general that the gender barrier, while still existing, can no longer be specifically referenced. In other words, the sexism is still there, the promotional opportunities are still limited, and a clear pay differential still exists. However, this pay gap is cloaked in subtle, hard-to-prove, linguistic differences in job descriptions and by generally overlooking women for promotion.

After 40 years of service for the company, she left as she had started: a general employee with no management or team-leadership role. In contrast, the men with whom she had joined the company were all in middle and senior management. I attended her farewell and, from listening to the speeches from male managers, it was clear she was well liked, highly regarded and extremely competent. Not recognizing the irony of what he was saying, one even noted that she knew far more about the product than her male colleagues. I would argue that such glowing references for any man would have led to steady promotion and monetary advancement over his 40 years in the company. In contrast, her years of service earned her little more than a nice morning tea and an expensive farewell gift.

## Why we don't challenge the status quo

When I asked her if she felt resentment about this state of affairs, she shrugged and asked what she could have done to change matters. I found this response a classic indicator of how gender (and other) biases are maintained in the tech sector, and business in general. When those being disadvantaged can recognize their structural disadvantage but see themselves as too insignificant to challenge it, they become accessories to their own maltreatment. Indeed, women who accept this state of affairs often look at the new generation of women making their way in the sector and try to dissuade them from challenging sexist behavior in the workplace. While agreeing that it is unacceptable, they stress that it can only end badly in terms of being viewed as a difficult, stroppy woman and ultimately being unofficially blacklisted when it comes to opportunities. The irony is that, in an unofficial sense, these younger women are already promotionally blacklisted by virtue of their gender, so it could be argued that they have little to lose and much to gain by actively challenging the old attitudes, behaviors and treatments.

## Are we suffering from nurse syndrome?

While women clearly have a greater presence in tech compared to the past, this presence is comparable to the situation of women in the medical sector in previous decades: Yes, women were represented in medicine – but almost exclusively as nurses. To coin a phrase, women in the tech sector in 2019 are suffering from what I might call "nurse syndrome": they are in the industry, but in less influential, less respected, less technical (and therefore, less well-paid) positions. These are the areas considered non-technical, particularly technical writing, administration and HR. Having worked as a technical writer at a large multinational company for the best part of a decade, I am all too aware that my area is one of the few where women are gaining ground. This fact is quite obvious on a simple walk through our building. We have testers, developers, any number of engineering specialists, a whole floor of senior managers… and then… the technical writing department. Floor after floor, the few women you see are either secretaries or cleaners. Then, suddenly, BANG: You arrive at our department where females outnumber male colleagues by approximately 6 to 1. But when you do the calculations for technical leads and departmental managers, the status quo kicks in and you note that none of the management roles are held by women. This is in spite of the fact that some of the women in our department are outstanding, in terms of attitude, experience and ability. The backhanded compliment often paid to these women is that their male bosses divest themselves of large parts of their job description, trusting these women to take these tasks on. They are essentially fulfilling a large part of the management role without the respective salary.

You might ask why these women would accept such a state of affairs and, if you are a man, it might be difficult to fathom. However, ask any traditional underclass and they will most likely give you the same answer: Having been brought up expecting to miss out on opportunities, when given such responsibility, the honor of being chosen is often perceived as payment in and of itself. In some instances, the women are so grateful that they will happily take on the role gratis. In other cases, they might take on the role thinking "I will show them how brilliant I am and then they will have to pay me or promote me!" This is naturally a naïve ploy that rarely leads to the desired result and which no one from the dominant group (largely middle-class, white, male) would be likely to employ as a methodology for advancement in the workplace.

## Going beyond diversity initiatives

A common feature in most tech companies, which is always pointed to as "proof" that women are a valued part of the organization, is the initiative for identifying potential leadership skills in female employees. The results are women's groups that not only provide opportunities for networking, but also invite guest speakers, set up conferences, and organize "girls' day" (or "take our daughters to work day"), an annual event where school girls are encouraged to come to the local plant to kindle their interest in a career in the tech sector. These events usually consist of photo opportunities where girls are encouraged to don a lab coat and a hard hat, and stand in front of an impressively sophisticated piece of hardware. On a superficial level, these initiatives all look very good and they allow companies to put a big tick in the box

for "diversity initiatives". However, speaking frankly, these initiatives come across as little more than a cynical attempt to be seen as doing something, rather than actually doing something.

One of my colleagues serves on the national executive board of our company's women's initiative. She devotes a few hours a week to this role but, although this work is sanctioned and sponsored by the company, her manager and other men in the department regularly complain about her activity. They see the group as a cozy club for pushy women who want an unfair advantage. Interestingly enough, some of these men are also local union representatives. The apparent irony was not lost on me. Trade unions were established in the 1800s because workers recognized that they were being exploited and underpaid. These early unionists realized that the bosses would not improve their lives and working conditions purely out of the goodness of their hearts. They had to be held to account. Well over 100 years later, it might be argued that the life of a worker in Western culture has greatly improved – yet, unions still exist because the working man recognizes that advances can never be taken for granted and there is always more to be done. I assume that this is the reason the aforementioned colleagues are involved in the union.

Colleagues often say that women don't need these initiatives as:

- Trade unions fulfill the role of looking after their interests,
- Women already have equality in the workplace,

to which I would respond: "Really?"

I am firmly convinced that if our sector's unions were truly concerned about the gendered pay and promotion gap, these gaps would be narrowing.

## The myth about women's quotas

As indicated above, one of the key reactive responses to female initiatives in the tech sector is to view them as creating an unfair advantage. The quickest way to find out if one's colleagues truly grasp the issue of equality within tech is to mention "women's quotas". This is the litmus test regarding the level of enlightenment and commitment to increasing the number of women in technology. The most common complaint is that, with a women's quota, the best person won't get the job. Naturally, this is based on the premise that the best person is still a man. I also often hear the resentful comment that every job given to a woman in the sector is a job stolen from a man.

The fact that men, and sadly many women as well, feel comfortable saying these things out loud, clearly indicates that we still have a problem. Every time these comments are uttered, I say: "Look around you, look at 5,000 years of men's quotas in action! How many women missed out on the job they would have been perfect for due to an entrenched, publicly supported men's quota?" When a man receives a promotion, no one claims that he got that job because he is a man. But if you stop and reflect, in a sense he did – because his whole life long, he and those on the appointment committee have been schooled to think that this promotion, any promotion, will most likely go to a man. If this is your underlying assumption, it is most likely that you will end up with the this result.

So, coming back to my central thesis, that in spite of what the sector claims about increased gender equality, there is still a massive gap between appearance and reality. Women are underrepresented in almost all technology sub-sectors, particularly in the area of management. Subliminally gender-impacted appointments mean that women are still the exception in tech, and that they are still significantly less likely to attain promotions than their male colleagues.

## The need for female role models

The fact that areas such as engineering are still heavily dominated by men is naturally a result of what is happening in schools and universities. Clearly, as a culture, we still have blind spots when it comes to encouraging our daughters to take on those subjects and degrees that lead directly into hardware and software development. To achieve meaningful change, we need more than pictures of girls in hard hats and lab coats. Our sector needs to actively and practically engage with schools and universities, inspiring girls to view a future in tech as viable and attainable. As we all know, you cannot become what you do not see. Unless we have female Bill Gates and Steve Jobs figures as role models, girls will always be at a disadvantage. Just as many men won't watch a film or read a book with a female protagonist because they cannot relate to her, many girls and women cannot relate to the male icons within the sector. So how do we solve this? I don't know the answer, but I do know that it is not by mocking women's quotas, or making shiny videos paying lip service to the concept of women in tech, or sticking a token woman on the board and assigning her the role of the diversity spokesperson because you couldn't think of anything else for her to do. As a sector, we miss out on talent when we purposely or subliminally exclude one gender from significant parts of the industry.

As long as women are viewed as exotic in tech, they will never be granted the respect and opportunities they deserve as colleagues. Think about it metaphorically: In a room full of cats, a zebra stands out. As long as the cats are thinking "that's a zebra in the room", they are not listening to what the zebra is saying. The minute there are three or four or six or ten zebras, their input becomes more important than their biology. In most meetings I attend, I am the only zebra in the room. Therefore, we need to encourage girls to view ICT and engineering as viable careers. As women, we need to apply for promotions when they become available. We all, male and female colleagues alike, need to query injustice when we perceive it. We need to challenge inappropriate gender-based comments and actions where we see them. We need to stop discouraging female colleagues from speaking out or stepping up. This does not mean that we should unthinkingly support any female colleague applying for a promotion for which she is not suited. Rather, we should support those few women who do find themselves in leadership roles to mentor, guide and inspire women of the next generation whenever possible. Through truly supporting the notion of equality of opportunity in the tech sector, we do not hamper our industry. Instead, we make it richer and more diverse, thus improving it.

# The role of gender in technical writing

While technical writing started off as a side task on the desk of a – usually male – engineer, it has progressed into a thriving industry with a strong female quota. However, gender gaps and some stereotypes still persist.

Text by Afsar Sattari

Image: © monkeybusinessimages /istockphoto.com

In 2017, I conducted an analysis on the aspect of gender and gender hierarchy in the technical writing field for my dissertation at the University of Vienna. My research is based on gender theories, 14 studies and 12 interviews. The objective was to get a better understanding of the situation of female technical writers with regard to their level of education, wages, workplace atmosphere, stereotypes, participation in economic and social procedures, and managing the double burden of work and family life.

The final part of my analysis was to suggest necessary measures and actions, and to propose relevant solutions.

My initial assumptions to explain the shortage and the difficulties of female colleagues in technical fields were the following:

- A gender-specific upbringing that focuses on honing a girl's skills in language/social subjects, while boys learn technical or mathematical subjects
- A gender-specific division of labor at the workplace and at home, which allocates technical jobs to men and social work to women, and hampers both sexes in carrying out tasks on the basis of their actual capabilities
- Gender-specific pay gaps
- A male-dominated management style and hierarchical structure
- A degrading attitude towards women
- A lack of work-life balance offerings that allow working mothers to pursue their careers
- Household chores and child care duties that are still mostly considered a woman's responsibility

In addition to my theoretical investigations, I conducted twelve interviews with professionals who had all completed a higher education degree in a technical or scientific field. All these experts revealed a record of excellent achievements or publications in gender and/or STEM (science, technology, engineering, and mathematics) areas. The majority of my interview partners were technical writers or managers of technical documentation companies (58 percent). I also conducted interviews with three male technical writers to reflect their points of view.

## Gender sensitivity in technical fields

Apart from gathering statistical data regarding women in the tech sector, my goal was to find out more about the differences between men's and women's working styles, and how each gender can enrich documentation in their own specific way. Another aim was to investigate the impact of female staff on technical companies and whether this impact is visible on their website or in their corporate identity.

Here are my results:

### 1. The aspect of gender in tc

Technical documentation started off as a predominantly male-dominated profession, with male engineers acting as technical writers. Over time, the number of male engineers decreased and female technical writers entered the field. The newcomers were either female engineers or graduates of social science or linguistic areas. Today, about 40 percent of technical writers are female. The same number applies to tekom membership, where 40 percent of all members are female. This figure is expected to increase further as the number of female student members reaches 57 percent (status: 2015). However, as technical documentation is often located in the extended environment of research and development, the profession is still largely dominated by men.

As a result of educational programs at universities, as well as the work of state institutions and professional associations such as tekom, the sector has experienced strong professionalization. Technical writers have now reached a good educational level. However, there is still a high demand for skilled labor in this sector.

The wage difference between genders is lower compared to other technical sectors. But, despite a comparatively better division of power between genders in the technical writing field, the profession still shows patriarchal features and shortcomings in the promotion of women in this sector.

### 2. Increasing the presence of female technical writers

The following factors have contributed to the increased presence of female technical writers:

- A focus on imparting technology to the user and not developing it
- A shortage of skilled labor in the market
- A large number of women studying technical communication
- An increased number of employees originally from other sectors

| Position | Gender | Average | Standard deviation |
|---|---|---|---|
| Career starters – graduated less than two years ago | male | € 45,166.45 | 11,261.738 |
| | female | € 40,231.92 | 6,684.392 |
| | total | € 43,259.07 | 9,997.248 |
| Employees with no managerial role – graduated more than two years ago | male | € 51,572.19 | 12,532.278 |
| | female | € 46,304.88 | 10,849.931 |
| | total | € 49,337.58 | 12,114.164 |
| Employees in managerial positions in the technical communication department (in leading positions with staff responsibilities) | male | € 69,192.87 | 21,136.435 |
| | female | € 56,730.00 | 14,575.558 |
| | total | € 65,687.69 | 20,255.995 |
| Managing directors of a company (in leading positions with staff responsibilities) | male | € 54,000.00 | 6.000,00 |
| | female | € 64,000.00 | 18,330.303 |
| | total | € 59,000.00 | 13,371.612 |

*Figure 1: Wage differences in technical communication in Germany according to gender*
*Source: tekom*

| Position | Gender | | total |
|---|---|---|---|
| | male | female | |
| In training (students / full-time apprentices) | 2.1% | 4.1% | 3.1% |
| Career starters – graduation less than two years ago | 3.5% | 8.8% | 6.0% |
| Employees with no managerial role – graduated more than two years ago | 55.9% | 67.2% | 61.3% |
| Employees in managerial positions in the technical communication department (in leading positions with staff responsibilities) | 25.1% | 9.9% | 17.9% |
| Managing directors of a company (in leading positions with staff responsibilities) | 3.1% | 1.5% | 2.3% |
| Self-employed/freelancers | 9.9% | 7.8% | 8.9% |
| University professors, teachers, employees of educational institutes | 0.4% | 0.6% | 0.5% |
| Total | 100.0% | 100.0% | 100.0% |

*Figure 2: Employment position in Germany according to gender*
*Source: tekom*

- A large number of women in the translation sector
- A work-life balance culture promoted in some technical writing companies, allowing part-time and flextime work arrangements

All in all, these factors have resulted in the increased presence of women, a better work atmosphere, fairer treatment of women, and better distribution of power in the area of technical writing over the past decades.

## 3. Methodological differences

Despite the positive developments in the field of technical writing, still – more often than not – male engineers are assigned to write technical texts. Female technical writers, on the other hand, are often tasked with writing legal and marketing texts in which stylistic subtleties and linguistic nuances must be carefully considered. It is commonly assumed that women are more capable of empathizing with customers and expressing customers' interests and are thus better prepared to document the benefits of a product.

## 4. The wage gap

According to the tekom salary index 2016, published in May 2017, gender still plays a significant role regarding compensation in the technical writing field. This index reveals a ten percent lower wage for females compared to male colleagues. Possible reasons for this include:

- Different educational backgrounds and qualifications
- The tendency of females to give in quicker during salary negotiations and to accept lower salaries more willingly than men
- A large number of female translators, who are used to earning low wages, have entered the profession
- A lack of self-esteem preventing employees from applying for better jobs, even when they are capable. This is more pronounced in women than men
- Women are more likely to accept subordinate and minor positions, even if they have the same qualifications, academic degree, and work experience as their male counterparts

In companies that don't offer flexible work hours or part-time work, women with children often feel pushed to take on subordinate positions and responsibilities that don't reflect their qualification and work experience.


*Figure 3: Situation of white women and women of color in different positions in North American companies* *Source: Women in the Workplace 2016, www.mckinsey.com*

## 5. Stereotypes and clichés

General stereotypes, such as the suggestion that women don't belong in a technology field, are unfortunately also found in the technical writing sector. The inevitable result of this is a negation of women's competence.

The higher a woman's position and responsibilities, the more she is confronted with this stereotype. As Figure 4 reveals, the situation is even worse for women of color. A female of color in the role of an engineer would be confronted with even stronger discrimination than her white female colleague.

There are, however, other stereotypes that seem to work in women's favor. These include, for example, the generalization that women are better communicators than men, which might deem them more capable of delivering a message to customers than a male technical writer. In this context, it is also worth noting that a man's capability and competency can also be denied after his return from parental leave – particularly if he is working in a technical industry.

The stereotypes can be counteracted with the following measures within families, firms and on a personal level:

- Allowing flexible hours and work models such as telecommuting and home offices. These need to apply to all positions
- Establishing mentor and trainee programs for women
- Organizing diversity workshops
- Raising awareness of gender and racial issues through dialogue
- Enacting and supporting anti-discrimination rules
- Raising awareness of stereotypes and promoting disengagement from them

## 6. Hierarchical structures

A flat organizational structure that doesn't leave much room for hierarchical procedures best facilitates good cooperation between workers of both genders and all races. The skill shortage in technical firms can best be tackled by allowing all team members to fully develop their individual skills. In addition, a relaxed but structured work atmosphere will help encourage a healthy and valuable cooperation between all employees.

## 7. Work-life balance

Until today and throughout most societies, household chores and child and family care are still largely viewed as women's duties – which have always been and will likely remain unpaid. This role allocation is deeply rooted in our societies.

In fact, it is so well entrenched that, for instance, in Germany, official support programs for career re-entry are devised and designed for women only. This is despite the fact that many young men today take paternal leave and regularly encounter problems when trying to return to work. Therefore, these programs need to be redesigned for both sexes.

The lack of work-life balance within companies often forces female workers to take on lesser positions. A lack of work-life balance also often bars women from social activities and prevents their promotion.

## Increasing gender sensitivity in technical writing

To summarize my findings, here are some measures that will help increase gender sensitivity in companies:

- A gender-neutral corporate culture on all levels, starting from entry levels through to executive levels
- Work-life balance offerings
- Assignment of responsibilities according to capabilities, not gender
- Equal recognition of achievements of all technical writers
- Salary packages that reflect qualifications, work experience and responsibilities, not gender
- Salary increase in the technical writing field in order to increase the attractiveness of this field, especially in times of skill shortage
- More investment in the education of technical writers, especially in STEM qualifications
- Motivating technical writers to engage in social and trade union initiatives in order to defend their rights
- Initiating measures against stereotypes in company culture
- Emphasizing a participatory role for female technical writers
- Conscious involvement and inclusion of all technical writers' potential, regardless of race or gender
- Running broadband research on the situation of female technical writers
- Questioning binary upbringing in families and binary role patterns in companies
- Democratization of structures and leadership styles in technical writing companies

### ABOUT THE AUTHOR

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# Customizing DITA – the Relax(i)NG way

DITA was specifically designed to cater to a large range of content domains. But only when customized to your specific needs will it reveal its true power.

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When someone asks me how many elements there are in DITA, I answer "too many and too few". This is because DITA, like other XML standards, defines its elements semantically. And how many semantic tags do you need to describe the content in your content domain?

The DITA standard contains the most used elements across most of the current content domains where it is being applied. But your content does not require all of those elements. At the same time, there is always something very special about your domain that others do not need at all. And of course, other domains have a need for semantics you would not even know how to apply.

DITA was specifically designed to cater to such a diverse universe of content domains. And because of its design, it makes little sense to use DITA without customizing it. Using non-customized DITA means not understanding what DITA is all about.

This article aims to take away your misconceptions and, most of all, your fears about customizing DITA. A follow-up article will be published in *tcworld magazine* in July explaining how you can add your own semantic tags to DITA without breaking away from the standard. Together, these two articles will show you all it takes to make DITA fit your content like a glove.

## Why should everyone use and customize DITA?

When doing a repair job on the roof, you would be crazy to carry all your tools up the ladder. Instead, you would probably use a belt that contains only the tools you are likely to need for this particular job. When you create structured content, the tags are your tools, and with DITA, you have a set of preconfigured toolbelts that you can choose from (by including or excluding domains). Each toolbelt is a document shell and contains all the tags available in that type of document, plus the content models that define which elements are allowed where.

Instead of taking one of the already preconfigured document shells, you can create your very own shell containing the exact set of tools you need for your particular job. It is even possible to add your own very special tags without making your content incompatible. In that sense, DITA is the only true XML (eXtensible) standard.

Unlike any other XML standard for technical content, DITA allows configuring document shells without losing the capability to reuse content across different content domains. After all, configuring a document is merely defining a smaller set of tags to be used in your customized document shell – which means your content will always fit the more elaborate model of the standard. And, even when you add your own specialized tags, they can always be traced back to the element on which they are based – so that any DITA processing software can work with your special tags without choking on them. This is truly unique, and we would be silly not to put it into practice.

## Relax – customization no longer requires a nerd

Until DITA 1.3, creating toolbelts for specific jobs (i.e. specific business domains) required a fair bit of knowledge of DTDs and the way the modular DTDs of DITA are designed. An exclusion of a domain or a single element would take up to five consistent edits in different files. And if any of those edits contained a typo or were done the wrong way, you would end up with an invalid DTD – or with a valid but non-DITA DTD.

With the 1.3 release of the DITA standard, configuring the document shells has become much easier. This is due to a change in the way the content models are defined. The modular set of DTDs have been replaced with a modular set of Relax NG files. This change makes all the difference, as DTDs were never really good for modularity, whereas Relax NG is. In fact, there are a lot of concepts in Relax NG that are very similar to the reuse we know and love in DITA. Relax NG files – especially the ones created for DITA 1.3 – are a collection of reusable patterns and pattern references.

Instead of having to make multiple changes to DTDs to remove a single element from your toolbelt, you usually only need to edit one single line in Relax NG. Where DTDs are really not defined as XML at all, Relax NG is. This makes configuring a content model in Relax NG a lot easier than trying to make it work in DTDs. And once you are done with your customizations, there are tools available to transform your Relax NG modules into the shell DTD that your authoring system uses for validation.

By the way, for those using DITA 1.2, Relax NG files have attributes to indicate which additions were done for version 1.3. DITA, unlike many other XML standards, is fully forward- AND backward-compatible, so there is no valid reason at all to stick with an older version of the standard. And even if you must, it is really easy to filter the DITA 1.3 additions from the Relax NG files, leaving you with just the DITA 1.2 materials, but in a much better format than the older DTDs.

## Basic Relax NG model

Relax NG is based on patterns. Each pattern has a name by which it can be referenced from anywhere in the file. This should make DITA users happy, as it is very similar to the conref mechanism. You define your pattern in one spot and reference it wherever you want to reuse the same one. Yes, DTDs also allow this type of reuse, but they rely on entities, which are not nearly as easy to handle (and they are not really XML).

Let's look at a fictional content model to understand the idea of patterns:

```
<define name="myelement.content">
    <ref name="title"/>
    <optional>
        <ref name="metadata"/>
    </optional>
    <oneOrMore>
        <choice>
            <text/>
            <ref name="ph"/>
            <ref name="term"/>
        </choice>
    </oneOrMore>
    <zeroOrMore>
        <ref name="note"/>
    </zeroOrMore>
</define>
```

This element has a mandatory "title" pattern, followed by a single optional "metadata" pattern, then some content (at least one piece of plain text or a "ph" or "term" pattern), and finally any number of "note" patterns.

Note: It seems a little tedious to talk about patterns instead of elements all the time, but there is a good reason for this, which will become clearer in the section on specialization. In the remainder of this article, I am using quotation marks to indicate the pattern and angular brackets to indicate an element.

## Customizing DITA patterns is constraining them

When we want to customize "myelement.content", we have several options. If we want to force at least one "note" at the end, we can change the <zeroOrMore> into <oneOrMore>. Making the "metadata" mandatory is done by unwrapping the <optional>. We can also

remove the "metadata" and the "note" altogether (remove the elements around it, as <optional>, <zeroOrMore> and <oneOrMore> cannot be empty).

The rules for customizing DITA are quite simple, and they all come down to the same single strategy that allows DITA to remain forward- and backward-compatible:

You cannot introduce any new content items anywhere.

The reason for this restriction of your freedom is that your content must be a subset of the full DITA model, so that any DITA processing tool can make sense of it. This is even true for specialized elements, as will be explained in the next section of this article.

The above strategy leaves you with the following set of allowed actions:

- unwrap <optional>: makes the referenced pattern mandatory
- remove <optional>: makes the referenced pattern not allowed here
- unwrap <choice>: makes all the patterns in it mandatory
- remove <choice>: makes all the patterns in it not allowed here
- remove a pattern from a <choice>: limits the choice to the remaining patterns (when there is only one pattern left in the <choice> you should unwrap <choice>)
- change <zeroOrMore> into <oneOrMore>: makes sure the contained pattern is used at least once
- change <zeroOrMore> into <optional>: limits the contained pattern to one optional occurrence
- unwrap <zeroOrMore>: limits the contained pattern to one mandatory occurrence
- remove <zeroOrMore>: makes the contained pattern not allowed here
- unwrap <oneOrMore>: limits the contained pattern to one mandatory occurrence

None of the above actions will either introduce a pattern where it was not allowed before or remove a mandatory pattern. This means the changed content model is a subset of the model that you started with, and this ensures you remain within the DITA standard.

There are a couple more complex actions that are allowed when you have a <choice> as the only child of either a <zeroOrMore> or a <oneOrMore> pattern. Here is an example from the DITA <section> element:

```
<define name="section.content">
 <zeroOrMore>
  <choice>
    <text/>
    <ref name="basic.block"/>
    <ref name="basic.ph"/>
    <ref name="data.elements.incl"/>
    <ref name="foreign.unknown.incl"/>
    <ref name="sectiondiv"/>
    <ref name="title"/>
    <ref name="txt.incl"/>
  </choice>
 </zeroOrMore>
</define>
```

In the actual DITA model definition, the "section.content" model contains a <zeroOrMore> with a reference to the "section.cnt" pattern, which then contains the shown choice. I have unwrapped the "section.cnt" pattern to clarify the example.

Note that you can have any number of "title" patterns in a section, and they can occur anywhere. An obvious restriction most DITA users would want to put in practice is having only one mandatory "title" at the start of the section. This is achieved by moving the "title" reference to the start of the content pattern, before the <zeroOrMore>. The new content model for section looks like this:

```
<define name="section.content">
 <ref name="title"/>
  <zeroOrMore>
   <choice>
    <text/>
    <ref name="basic.block"/>
    <ref name="basic.ph"/>
    <ref name="data.elements.incl"/>
    <ref name="foreign.unknown.incl"/>
    <ref name="sectiondiv"/>
    <ref name="txt.incl"/>
   </choice>
  </zeroOrMore>
</define>
```

This is allowed, as it will still be valid against the original definition. In fact, you could also copy the "title" reference there – this would force at least one "title" at the start of a section but allows more "title" patterns anywhere else inside the section. Finally, it is also perfectly legal to push the "title" to the very end of the section, right after the <zeroOrMore>. I cannot think of a practical use case for this, but as the DITA model needs to cater to any possible business domain, its base content models tend to be very loose. Which is why every organization should really apply a set of constraints as the first step in a sound content strategy.

## Modularity and pattern overrides

Modularity is as natural to Relax NG as it is to DITA. Patterns can be defined in separate files, and these files can be combined via the <include> element, with an @href that points to the file to be imported. All the imported pattern definitions come into scope. To remove a full domain from your DITA shell, you simply remove (or comment out) the line that includes the Relax NG file for the unwanted domain. So, if I work in the machinery business and have no need for any software, programming or user interface elements, I can remove a lot of elements by editing my concept shell like this:

```
<a:documentation>MODULE INCLUSIONS</a:documentation>
<include href="../../base/rng/topicMod.rng"/>
<include href="conceptMod.rng">
  <define name="concept-info-types">
    <ref name="concept.element"/>
  </define>
</include>

<include href="abbreviateDomain.rng"/>
<include href="../../base/rng/hazardstatementDomain.rng"/>
<include href="../../base/rng/highlightDomain.rng"/>
<include href="../../base/rng/indexingDomain.rng"/>
<!--<include href="programmingDomain.rng"/>-->
<!--<include href="softwareDomain.rng"/>-->
<!--<include href="uiDomain.rng"/>-->
<include href="../../base/rng/utilitiesDomain.rng"/>
```

So, what if I want to use some of the patterns defined in an included file, but not all of them? And what if I want to constrain a pattern from an included file in this topic shell, but not in all the others at the same time? This is where the pattern override feature of Relax NG comes in handy.

The override is a pattern definition that is placed inside the <include> for the file in which the original pattern is contained. This allows constraining the content model for an element in one topic type while keeping it unconstrained in all the other topic types.

If I want to apply the "title" constraint for a <section> that was shown previously to all my topics, I would edit the file in which the "section.content" pattern is defined: topicMod.rng. But if I only want to make that constraint for my reference topic, I would add an override to the reference.rng file:

```
<include href="topicMod.rng">
 <define name="section.content">
  <ref name="title"/>
  <zeroOrMore>
   <choice>
    <text/>
    <ref name="basic.block"/>
    <ref name="basic.ph"/>
    <ref name="data.elements.incl"/>
    <ref name="foreign.unknown.incl"/>
    <ref name="sectiondiv"/>
    <ref name="txt.incl"/>
   </choice>
  </zeroOrMore>
 </define>
</include>
```

Unfortunately, the original DTDs for DITA used nested included files, which was not a very wise design decision. The Relax NG files needed to remain backward-compatible and are using the same unfortunate design flaw. This means that the override pattern is only really useful for the domains and not for modules with common elements. (I have edited the basic DITA 1.3 Relax NG files to bring all nested includes up to the topic shells. This allows me to keep all editing restricted to the single top-level Relax NG file that defines a topic. If you are interested in this set of adapted Relax NG files, drop me an email.)

A very useful Relax NG pattern for overrides is <notAllowed>. This makes it totally easy to remove a particular element from your entire topic. Let's say you need to allow some but not all elements from the highlight domain. You will then simply create a <notAllowed> pattern for all the elements you want to suppress:

```
<include href="../../base/rng/
highlightDomain.rng">
    <define name="overline">
        <notAllowed/>
    </define>
    <define name="line-through">
        <notAllowed/>
    </define>
    <define name="tt">
        <notAllowed/>
    </define>
</include>
```

Again, this does not make any changes to the included module – so that other topics may still use all the elements in the highlight domain.

## Closing remarks

If you are using <oXygen/> for authoring DITA, you can use your edited Relax NG files to do validation. Instead of the usual DOCTYPE declaration that points to a DTD, you will have to link your DITA topic to the top-level Relax NG file. The details to make this work fall outside the scope of this article but are easy enough to find in the support forum.

If your authoring application (or CCMS) requires DTDs to validate your DITA content, you still need to transform the Relax NG files to DTD. This can be done with a free plugin for the DITA Open Toolkit, which was developed by Eliot Kimber. This transform creates a modular set of DTDs in the style that was used before DITA 1.3 – with all the module names, entity declarations and even documentation transferred to the DTDs as if you had manually edited them.

Another option is to use a transform that I have recently created. This transform creates a single (i.e. non-modular) DTD out of your set of Relax NG modules for a particular topic type. The transform is available via www.smartdita.com/dita-tailor. If all else fails, you can drop me an email and I am sure we can figure something out.

In part 2 of this article (which will be published in July) I will cover specialization. Here, you will learn how to add your own tags to DITA without breaking away from the standard – and without causing any hiccups in your DITA authoring or processing applications.


ABOUT THE AUTHOR

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# When user assistance meets user experience

Both a content strategy and a design strategy are focused on the same goal: Creating experiences that are clear, concise and consistent. So, what does it take to create experiences that work seamlessly across products?

Text by Nithya Krishnan


Image: © Besjunior/istockphoto.com

Content and design both need to reflect the company's brand. In this article, I'd like to highlight some factors that will help to knit together the worlds of content and design.

## Content strategy and design strategy

A content strategy can hold the whole project together by reflecting the tone and voice of the company. When content is thought about early in a development process, it can provide some fantastic results. A consumer's experience with a brand starts the instant they see content, be it marketing material, labels and messages on applications, tutorials, or guides.

A design strategy shows you where and how the user requirements and business goals coincide and reinforce each other. It helps you to pinpoint opportunities and subsequently design delightful experiences. It provides a platform for designing the right product or service, aimed at the right customer segment.

## The world of content

The way we provide content to users has drastically changed in line with changing technology trends. The medium through which users access this content has also changed. Content has evolved from printed manuals to online help on websites and apps through to content that is provided in the form of images, videos, audio files, podcasts and much more. With new trends such as Artificial Intelligence (AI) and machine learning, we are faced with modern ways of communication using conversational user interfaces.

But regardless of the output format, the one thing that has stayed the same is the need for content. What has changed is the definition of the kind of content suited for the product in use. Content is all about conveying information – making the user feel interested, intrigued, even entertained. Content is still a fundamental element of the product. It's the content that customers interact with and respond to. Not paying much regard to content until the end of the design process is a missed opportunity.

## The world of design

Changing technology trends have also had a huge impact on the way products are designed. Some of the key strategy shifts in the field of design range from simple web-based applications to more futuristic cloud applications, to harmonizing user experiences across industries and domains. The fundamental design of products has changed, and so has the user base. Going by the design philosophy "less is more", designers are conscious of the optimal and most efficient way for users to consume a product. If the users run through an interface effortlessly, the design is working.

## When content meets design

Both content and design are evolving, adapting and changing to become even more relevant to the unique requirements and needs of the user. Without great content, a product or service can easily fail. While good design comes with multiple iterations, so does planning content. It's important to coordinate the two at the very beginning of any project.

> Great content will only add to your user experience, design or product. It is an investment worth pursuing and not cutting budgets for.

To draw an analogy, content and design are like two sides of the same coin. They are inseparable in their co-existence. Great content needs inspiring design. Great design needs inspiring content. Content and design have one common touchpoint: the user.

Think about a user interface with only words. Too textual, you may say?

Think about a user interface with a fancy design but no words. Can't make out what you need to do?

It is crucial to decide how much content is required to enhance a design and vice versa. Adding more of each isn't always the solution. Sometimes a design needs to be tweaked so that it's less distracting and focuses the reader's attention on the content.

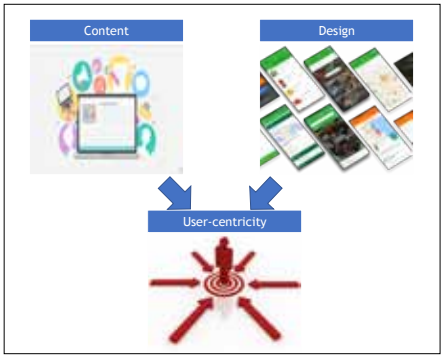


*Image 1: Common touchpoint: User-centricity*

A billboard, for example, may need a really simple design that clearly displays the message. If the design causes distraction, the message doesn't come across to the reader. Consider another case, a business application that has a complex workflow in place. It can be made more readable by using taxonomy that fits into the context of the business at hand, rather than fancy jargon.

In some cases, the design is created in such a manner that it demands the content be kept minimal. In this case, working on a short and crisp headline for the title or a heading might be what you need. To detail the product further, you can make use of quick videos or tutorials.

The culmination of both content and design is what will pave the way for better and more delightful experiences. Designers need to realize the importance of creating designs that are seamless and effortless for the user, and writers need to be flexible enough to add the right content to enrich this experience. This can be achieved by bringing in a process that helps professionals from both sides to co-create better solutions.

## Design-led development

Every company has a certain brand voice and a customer base it caters to. The products that the company creates must address the needs of its users across all lines of business, tasks, and devices. But how can a company deliver a consistent design to its users who span across different lines of business? The answer is by adapting the design-led development process.

Design-led development ensures that the needs of end users are addressed at every step along the way. It takes advantage of proven design-thinking methods to achieve an optimal user experience.

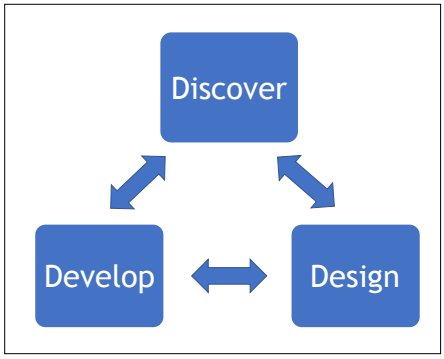


*Image 2: Design-led development process*

The process spans the entire development lifecycle, is simple and easy to follow, and provides the right platform for scaling design.

Developing software is much more than just coding. It's about putting the user first, from start to finish. To do so, it is critical that you first understand who your end user is. That's why the design-led development process begins with the *Discover* phase. At this stage, you focus on understanding your customers, how they work, and what they need. Only then do you move on to the *Design* phase and create the initial prototypes for development. After the *Develop* activities, such as implementation and testing, your app is ready to deploy. Through the course of this process, you can define design checkpoints that act as milestones along the way. This ensures that the design of your product is consistent and iterative.

The main emphasis of this kind of design-led development process is on the first two phases – *Discover* and *Design*. These two steps are just as important as developing the software itself. This is also the phase where involving both the designer and writer is crucial. Content shouldn't be an afterthought. It must be considered right from the beginning of this process.

## Co-creating product experiences

In a traditional development process, we've observed that the design phase generally involves designers and product experts. Although we might get a feeling for the overall user journey through user research and various discussions, these don't necessarily help when it comes to the overall product experience.

Bringing in a strategy that involves both designers and writers in achieving this holistic picture can create a better user experience. You might wonder: what's in all of this for the writer? Remember, ideas, concepts, personas, and process flows are all content-driven. Instead of filling in your writers with the story, involve them. They are the best judges of what the user needs to know.

Before rushing through the process of creating mockups or wireframes, go over the user story. When you plan what you want to communicate to your user, words are often the best starting point from which you can build your layout. Fabricio Teixeira, design director at Work & Co, discusses this subject in his article "Storyframes before Wireframes", suggesting that by starting designs in a text editor, we can tell better stories through our UIs. Both designers and writers can sit through this process and come up with an interesting storyframe.

Once the storyframe is intact, the wireframing part follows. With the mockups and optimal content in place, the design checkpoint discussion can move on to the rest of the stakeholders.

One thing that I have observed, especially during design review discussions, is how many stakeholders question a text on the mockup though the actual discussion is about the design. For instance, for products involving billing as a feature, this can have many associated terms such as "bill", "invoice", "account", "charge", "rate", and so on. Which term fits can best be decided based on the user persona and the user story.

Similarly, in some products that involve a postponement feature, this can be referred to in multiple ways, including "postpone", "defer", "later in time", "put back", and so on. It is crucial to select the right term so that users don't get confused about the function.

Another example is the amount of information that is required on the interface. To avoid cluttering the user interface with content, you can consider options such as embedded help or contextual help that can be pulled up by a user if required. As you can see, it is the context and business at hand that determines the right content in the right place.

By the time you have multiple iterations of a design, you can have a high-fidelity mockup that contains taxonomy or terminology that best fits the use case at hand, rather than just having some random placeholder text. From screen to screen, context to context, writers must push for an experience that supports the user at every turn.

A strong creative team will think about what the user cares about and what should be in focus. The user doesn't necessarily "see" how well a page is designed. In fact, no user really sees a good design (they only see it if it isn't working!). It's simply a natural, pleasant experience that they don't consciously take notice of.

The same applies to content. People don't have time to be bombarded with long sentences and paragraphs while using an app. They look for crisp information that helps them to make decisions and move on. The trick for a writer is to keep the attention span of the user and ensure that the content isn't confusing but helps to guide the user through the product.

> In the words of the famous web designer and entrepreneur, Jeffrey Zeldman: "Content precedes design. Design in the absence of content is not design, it's decoration."

Content is really a key component in the foundation of the design. Not just how it fits the spaces given in the design, but how it can be repurposed, how it can be altered and adapted, and how it can influence the very core of what you're creating. Content cannot be an afterthought.

## Who wins?

Those wondering which strategy is more important – user experience or user assistance – are way off base in the way they are approaching the two professions. You can't have one without the other.

Even though UX and UA teams have specific guidelines of their own, the synergy of these professions can have a much better effect than each one individually. Call it a win-win or an equal game – it always works wonderfully when UX and UA collaborate. Because UX attracts while UA retains.

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### ABOUT THE AUTHOR


**Nithya Krishnan** is a user assistance developer and user experience advocate. In her 10+ years of experience in the field of technical communications, she has authored end-user documentation across various domains. With an academic background in information technology, her interest lies in creating a cohesive learning environment for all roles involved in a software development process.

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# TAPICC and the language industry's quest for interoperability

A collaborative, pre-standardization initiative strives to build consensus on use cases, metadata, and best practices for translation APIs.

Text by Allison Ferch

Image: anyaberkut/istockphoto.com

For professionals handling multilingual content, the translation round-trip – or the transfer of data between various platforms and systems – is an important factor that can have a significant impact on project cost and time to completion. If you stop to think about the complexity of modern-day content management and the numerous types of systems involved, you can see how desirable interoperability is, and why it's worthwhile to strive for a standardized approach to the translation round-trip.

## The problem

This common challenge has traditionally been solved by using API integration, or system-to-system communication that enables automation of repetitive tasks such as extraction and file transfer. The problem, however, is that there is an overabundance of customized APIs between a staggering number of systems and platforms. Customized API solutions require a commitment to a particular vendor or specific tech-stack, which are not easily adapted if either of those change. Furthermore, they require a great deal of resources in terms of IT, development, and of course, time and budget. Proprietary APIs hinder collaboration between industry players and make change difficult, which can stifle progress and innovation. It's easy to see how the customized approach makes companies feel that they are stuck or are reinventing the wheel each time they forge a new connection. And the impact isn't felt by just one party: clients feel it, translation vendors feel it, and tool developers feel it. It's a ubiquitous and costly problem for those in the language industry.

Additionally, there is an untold impact on global customers. It's well-understood that translating and localizing content provides a better user experience and can lead to customer acquisition, loyalty, and retention. But the cost and complexity of the translation and localization process, especially around system integration and automation, can mean companies forego those endeavors to save money and, in doing so, leave important content untranslated.

What can be done to improve matters? How can we eliminate loss of operational freedom, wasted resources, and untranslated content streams? A magic wand would give the industry a universal standard, similar to the Bluetooth standard for the transfer of data between wireless devices. But without a magic wand, the challenge must be tackled the old-fashioned way with hard work, reasoned debate between competing interests, and consensus-building among stakeholders.

The Translation API Cases and Classes (TAPICC) initiative was launched in 2017 to address this interoperability challenge. At the outset, it was established as a community-driven, open-source initiative to advance API standards for multilingual content delivery. It was designed as a pre-standardization project, its purpose to provide a metadata and API framework on which future integration, automation, and interoperability efforts can be based.

TAPICC aims to build a collection of use cases and best practices for all stakeholders and provide quickly implementable classes (code) for deployment. All these deliverables are meant to be donated to bona fide standards organizations for further development.

Happily, TAPICC has been making excellent progress these past 18 months through its working groups, which are led by passionate volunteers committed to the common good and the advancement of the entire sector through open standards.

## TAPICC charter, governance, and deliverables

The TAPICC initiative is managed by the Globalization and Localization Association (GALA), a global industry association for the corporate language sector. GALA's independent, nonprofit status and its global reach make it a trustworthy steward of industry development projects like TAPICC. To the extent possible, we have approached TAPICC in ways typical of open standards projects, including the development of a project charter, steering committee, and timelines and milestones.

While GALA is not a standards organization (and does not intend to become one), we felt it was important that the work of the TAPICC initiative meet the rigorous expectations of standards bodies.

The stated goals of the initiative are to:

- Identify use cases for API standardization in the localization industry; classify and categorize these use cases and match them with any existing projects to provide a starting point for further standardization.
- Harmonize the business metadata of existing standardization projects, extend them with community-driven input, and publish standardized sets of business metadata for future use.
- Create API classes that can be implemented by clients, LSPs, and technology vendors alike.

TAPICC was set up as a collaborative community project on the GALA platform with the understanding that consensus-building would be critical. It openly encourages participation by all community stakeholders including language service providers, translation and localization buyers, language technology vendors, and researchers. GALA membership is not a requirement for participation, and anyone is welcome to join the working groups. All contributions are governed by well-regarded open source legal agreements (BSD-3 Clause and CC-BY 2.0) and works-in-progress and deliverables are publicly available on platforms like Google Docs and GitHub.

The initiative is guided by an experienced steering committee of forward-looking, proactive practitioners setting project priorities and defining deliverables. GALA serves as the platform for collaboration, project promotion, and dissemination of information. TAPICC has a few dozen committed contributors and the support of more than 275 volunteers who follow its progress with interest.

The project follows four main standardization tracks, including:

1. Supply chain automation: Enable the exchange of business metadata, localizable content, and automation-relevant functionality between content repositories and localization environments
2. Transfer of localizable content on a segment or unit level: Enable the handing over of segments and units within the localization process, for instance between different localization tools
3. Enrichment of localizable content: Enable the markup of localizable content with linguistic information such as TM matches, MT output, terminology markup, "good enough" layout markup
4. In-layout translation: Enable an abstract layout representation in localization con-

tent to allow the translation and review process to happen in-layout, independent of the content source

To date, the work of the volunteers has focused on Track 1, supply chain automation. Track 2, transfer of localizable content on a segment or unit level, is about to commence.

## Track 1 progress and deliverables

Track 1 was divided into four working groups at the outset: business metadata, payload specification, XLIFF extraction, and API specification. There were significant interaction and dependency between the groups, plus no small amount of disagreement and debate, as they sought to develop consensus.

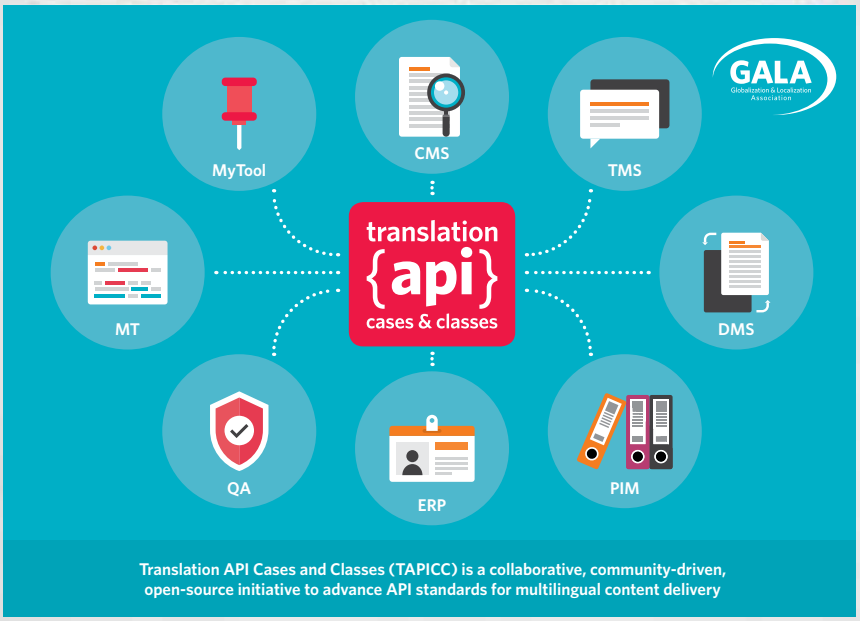
Working Group 1 (WG1) took on the challenge of defining task types that are common in translation and localization projects. They developed a multi-tier task type typology and generalized eleven tasks that comprise any and all content-related tasks in translation workflows. Those main tasks were further broken down into subtasks that can be used when more details are known about the project in question. The typology developed by WG1 was used in Working Group 4 (WG4) to define the API, and it was generally agreed that high-level tasks will have fewer details and be less defined than the granular, concrete subtasks. With this metadata model, only a limited number of "task element types" is needed to build just about any workflow with any level of detail.

Working Group 2 (WG2) was mandated to specify what kind of payloads will be exchanged via the API. This group produced critical consensus on the payload being driven by the task type defined within WG1. Importantly, they concluded that all bilingual linguistic tasks such as translation and review must be based on exchanging the open transparent bitext format XLIFF 2. Further, they determined that standalone terminology should be exchanged as TBX Basic (compliant with ISO 30042:2019 a/k/a TBX Version 3, or 2nd ISO edition). Terminology accompanying translation and revision tasks must be either XLIFF Glossary Module-based or TBX Basic-based.

Working Group 3 (WG3) explored the best practices for producing XLIFF, i.e. the payload type critical for core TAPICC use cases. This group produced the first formal TAPICC deliverable: TAPICC XLIFF 2 Extraction and Merging Best Practice (https://galaglobal.github.io/TAPICC/T1/WG3/rs01/XLIFF-EM-BP-V1.0-rs01.xhtml). This deliverable was contributed by GALA to OASIS XLIFF TC, which pledged to re-release it as a Technical Committee Note and maintain it. That contribution marked a key accomplishment of the TAPICC project.

The mission of Working Group 4 (WG4) was to "tie it all together" – the edicts, recommendations, etc. from the other working groups – into a RESTful API specification that supports standardized system-to-system transactions. The deliverables include a Swagger file and a reference guide to support developers who endeavor to create so-called TAPICC-compliant implementations.

The body of work produced in Track 1 represents hundreds of hours of collaboration among volunteers spanning the globe. Working through different points of view across a diversity of use cases is no small endeavor and we take off our hats to the people who have contributed so much to the project thus far.




The TAPICC Steering Committee includes David Filip (ADAPT Centre at Trinity College Dublin), Serge Gladkoff (Logrus Global) and Klaus Fleischmann (Kaleidoscope Gmbh). Working group leaders include Serge Gladkoff (Logrus Global), Jörgen Danielsen (Eule GmbH), Ján Husarčík (Akorbi), Alan Melby (Brigham Young University), Andreas Galambos (Transmission Uebersetzungen GmbH), Jim Compton (RWS Moravia), Ian Barrow (Conversis).

## What's next?

At GALA's annual conference in Munich (March 24-27, 2019), there were two pre-conference TAPICC workshops. One focused on the output of WG4, the TAPICC RESTful API specification, and addressed how to create a TAPICC-compliant "host" system, or how to make your current system work with a TAPICC-compliant host. The second workshop focused on the upcoming work of Track 2 and introduced the concept of real-time exchange. It explored the differences between real-time and asynchronous exchange for supply-chain automation and examined related business cases. Participants also discussed JLIFF as the standard for the real-time exchange, which is a natural continuation of the consensus achieved by the Track 1 WG2, to use XLIFF 2 as the bitext format. The rest of

the workshop was dedicated to discussing a fork of the WG4 API, focusing on the proposal for real-time exchange. It marked the official launch of Track 2.

GALA is currently recruiting volunteers to participate in Track 2, and we encourage anyone with a stake in this aspect of multilingual communication to get involved. Additionally, GALA is preparing a few TAPICC presentations for upcoming conferences in 2019, to add to the more than a dozen presentations it has made on TAPICC these past 18 months in an effort to evangelize the project and garner support and engagement.

## Challenges and obstacles

We're delighted with the progress made by the initiative thus far, but it is not without its challenges and obstacles. As with any volunteer-led project, delays are inevitable owing to the limited bandwidth of volunteers, who have regular jobs and obligations to attend to. Planning meetings with busy professionals across time zones is always going to be a challenge, but it is critical to the progress of the working groups. (How far they have managed to come already is a credit to their commitment and passion for solving this challenge.) Furthermore, it's important for more than one person to take the helm of working groups to allow for the inevitable flux of focus and availability of each volunteer leader. However, finding volunteers willing to commit at this level is not easy.

With many initiatives, especially those related to standards, there can be significant "creep" in the mission or focus. The scope can expand or diverge based on the interests and priorities of those involved. With the TAPICC initiative, we've been very clear that we're not trying to boil the ocean and have stayed true to the well-defined goals set at the outset, in spite of many lively and passionate debates. But vigilance is important, and leadership and volunteers must remain mindful of the scope and aims of the project, even in the face of competing demands.

Another significant challenge for TAPICC is stakeholder representation. To date, the vast majority of the initiative's volunteers come from language service provider companies and the occasional localization buyer. The language technology developers have mostly camped on the sidelines, watching to see how the project develops. We'd like to see more balanced participation from stakeholder groups, which can only lead to better insight, better debate, and ultimately better buy-in.

## An open invitation

As a well-balanced representation of stakeholders is critical to the project's success, we invite all types of language industry professionals to engage in TAPICC. Content publishers, system integrators, language service providers, localization technology developers, multilingual content and process architects… all are needed to advance the initiative. Your experience matters, your opinion matters, and your input is helpful, no matter how small. To get involved, please visit www.gala-global.org/tapicc. Join a discussion group, attend meetings, and advocate internally for open standards instead of closed systems. Your opinion on the Track 1 deliverables is also important, and you're invited to share feedback. Start your TAPICC journey on the GALA website, and feel free to reach out to any GALA staff member or any TAPICC volunteer leader for more information.

### ABOUT THE AUTHOR

**Allison Ferch** is GALA's Executive Director. For more than nine years, she has served GALA in several roles and provided leadership for many of the association's programs and activities. As Executive Director, she leads internal operations at GALA and is responsible for the growth of the association, its financial stability, and for the execution and expansion of programs and services to members.

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# Driving digital transformation on a global scale

Supporting a digitally enriched customer journey right across all markets is no easy task. It involves far more than introducing new interfaces or apps. What organizations really need is to upgrade their global strategies.

Text by Rebecca Ray

Image: © 3alexd/istockphoto.com

It's rare to go for more than 24 hours without receiving an email that references "digital transformation" in some way. Organizations of all types – commercial, government, NGOs, non-profits, and educational institutions – spend a lot of time discussing the challenges and changes required by digitalization. But who's taking responsibility for the global ramifications of these initiatives? How are companies measuring success or failure? How will global content evolve as a result?

Based on in-depth interviews with C-level executives across various industries and a survey of 53 content marketing and localization managers, CSA Research shares how challenges and responsibilities for digital transformation are perceived and managed.

**How does the commercial sector define global digital transformation?**

Some executives refer only to what's going on in their marketing organizations when CSA Research analysts ask them to explain the term. However, our research covers the much broader spectrum of what an organization must do to upgrade its overall global strategy, people, processes, technology, and governance structure to meet, engage, win, and service customers – wherever they

happen to be in their digital world at any given point. Obviously, this is a tall order. That's why it's taking established medium- and large-sized organizations two to three years to reach their digital transformation goals across all areas of their business.

**Who's looking after the content piece of the digital transformation equation?** Or, as one of our interviewees put it, "Is our content managing us, or are we managing our content?" Hardly any organization bothers to appoint an executive to take charge of content as a strategic asset enterprise-wide. Top managers may claim to recognize content in this way and say the right things, but in reality, they trust their CMO, CDO, or CIO to "do the right thing." In almost all cases, this means that their digital transformation focus remains only on marketing content or the cost of producing content, with very little thought given to leveraging and monetizing this asset on a global scale.

**Change management trumps technology.** Executive interviewees report that processes and people typically require the time and the budget to catch up with the technology being implemented to support this digital evolution. At the same time, they point out that the alignment of people and technology is the easy part. What they spend more time on are the roadblocks created by the corporate culture as they ramp up their change management initiatives. As one interviewee put it, "Focusing exclusively on new user interfaces or apps is like 'putting lipstick on a pig' if you don't address the underlying processes and organizational structures that must adapt adequately to support a digitally enriched customer journey – especially internationally."

**A winning digital customer experience (CX) means globalizing business processes enterprise-wide.** Companies must figure out how to globalize digital transformation, just as previous generations of executives had to decipher how to globalize e-commerce. It involves much more than simply improving the performance of marketing programs worldwide or reducing the number of content management systems in use. It means preparing your entire organization to support customers seamlessly as they shift platforms online or move offline – regardless of language, time zone, or geography.

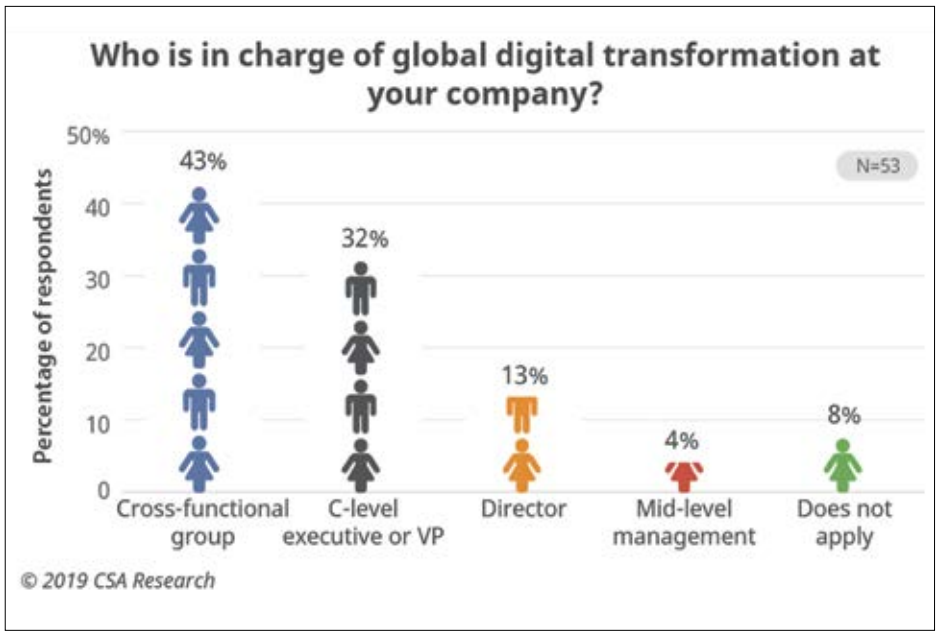


*Image: Who is in charge of global digital transformation?* *© 2019 CSA Research*

**Language service providers can add value**. One thing that everyone agrees on is that digital transformation is difficult, but that it is fundamentally no different from any other type of business transformation. How so? To be successful, it requires behavioral change, and will be ongoing. As a result, enterprises have chosen to bring in large consultancy firms – their frequent partners for big initiatives – to provide guidance. While these third parties can sketch out broad strategies, they are much weaker at understanding what's required at the local market level, or how to execute and scale their recommendations. Who can help? A small but growing number of language service providers have invested in deep content expertise and the ability to apply it to the global customer journey. These strategic LSPs are ideal for picking up where third-party consultancies leave off.

The executives CSA Research interviewed are the first to admit that they don't have all of the answers, or as one of them expressed it, "There are things that we know we don't know, things that some of us know but others don't, and things that we don't even know that we don't know." Buy-side localization teams – and their global content service partners – need to increase their efforts at building credibility for the global value they can add to enterprise-wide digital transformation initiatives. Doing so will allow the enterprises they work for to avoid the investment in re-architecting what global e-commerce required in the past.


## ABOUT THE AUTHOR

**Rebecca Ray** is a senior analyst at independent market research firm CSA Research. The firm focuses on research related to globalization, localization, internationalization, and language services. Rebecca's primary focus is enterprise globalization, social media, multilingual SEO, and global product development. She is fluent in English, French, and Spanish, and proficient in Portuguese and Turkish.

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# Is the translation industry suffering fast food syndrome?

Translation quality has been greatly compromised in the attempt to meet budgets and tight timelines. How good is "good enough"? Is it perhaps time to establish quality standards to protect our profession?

Text by Burckhardt Rueffer and Miguel Sevener


Image: © nicolasmenijes/123rf.com

Just like businesses in any other sector, language service providers compete for clients from a finite pool. The figures can be quite misguiding: According to market research firm Common Sense Advisory, annual enterprise spending on translation services is expected to reach US$56 billion by 2021. These numbers can give the false impression of a blooming industry with a promising future for all players, big or small, and all approaches, human and machine-based. What the number doesn't reveal is the reality of an increasingly consolidated market that "cannot meet anticipated volumes" through human translation. [1]

What does this mean? It means that **Quality** has been brought to the negotiation table that seats LSPs and clients who want to localize their content. Although quality was once a given, it has now joined **Speed** and **Cost** as part of the negotiation.

Language is typically defined as a "system", and as such, it is a very strange thing to commodify and sell as a product. Of course, the language itself is not the product, more so the highly qualified work that goes into transferring meaning from one language to another. Even though one would never dare bring the phrase "fit for purpose" into a discussion about air travel (Kamikaze Air™: "You may not make it alive, but we guarantee you will get there!") or heart surgery (Barebone Bypass™: "Get a couple more years out of the old ticker"), the quality of our translations is now fair play for sales and marketing strategists everywhere.

Levels of service are a legitimate business strategy and a valid product for certain uses. They also offer LSPs a level playing field to compete against the bigger providers. But it is not obvious that "good enough" translations are good for our profession. We would like to make the case for reclaiming the establishment of quality standards, instead of following the demands of a market that is often ignorant of our profession.

## The negotiation

This article, and the presentation we gave at tcworld conference 2018, were inspired by a real encounter with the "good enough" culture during the preparation phase of a very large project. In late 2018, we received an email from one of our clients with very high-visibility content. The company announced a translation project of 600,000 source words to be translated into twelve target languages.

600,000 words into twelve languages is a big deal for any localization service provider, so, after the initial reaction of hysteria had settled, we took action, rounded up every possible resource, and sent our client a detailed estimate including timelines and special volume-discounted rates.

Their response was quick:

> "We reviewed your per-word rates and found them to be about 15% higher than your competitors' rates.
> We don't need a full-on TEP (translation, editing, proof-reading) job, translation will do.
> We are also surprised that you charge for 100% matches. And we don't know what project management fees are for, since we are planning to handle the entire project through our Content Management System."

This won't come as a surprise; such negotiations are standard when dealing with large projects. What might seem new, however, is what is being used as leverage in this negotiation and what is being negotiated:

- **100% translation matches:** The reason we were proposing a symbolic rate for these is that the sample files shared with us were full of inconsistencies and all types of errors, which we recommended having reviewed by our linguists.
- **Dispensing with editing and proof-reading steps:** We believe in offering all-inclusive rates, and do not consider these essential steps in the process as "add-ons", just like you wouldn't consider technical inspections of a plane as an "added service" when buying an air ticket. Either it flies or it doesn't.
- **PM fees:** It is not entirely uncommon to waive this fee for certain projects. However, the justification in this case is a novelty of our times: It is based on the efficiency introduced by new technologies and tools which, in our experience, tend to create more problems than they solve.

In summary, the object of this negotiation was **Cost,** which is nothing new. What was new is that it was being leveraged against the **Quality** of the product, with the aid of new technologies and an improved efficiency that justifies this trade-off.

We pointed this out and made several compromises, to receive the final email which would set the tone for the entire project:

> "Thank you for sharing the updated rates. We are looking forward to working together on this.
> Regarding TEP, you bring up some interesting points that we will definitely discuss internally, but our main goal here is to make the content good enough to meet our launch date within budget."

## The "good enough" culture

The state of the industry: First, we believe it safe to assume that, given the option, translation buyers would always choose a high-quality translation over a poor one, if speed and cost were not a factor. Therefore, our starting point must necessarily be that – in the absence of deadlines and with no budget constraints – the buyer will always choose quality.

In reality, however, it appears that speed and cost are the two factors lessening the importance of quality in the client's decision-making. Those two factors cannot be understood without taking a look at recent trends in the translation market and the global economy in general.

It is almost impossible to obtain an exact number for how many words were translated by language service providers (LSPs) in any given year. The exponential growth of content is obvious, however, and we can get an indirect glimpse of it through other numbers:

- In the past two years alone, 90 percent of the data in the world was generated. [2]
- In 2017, Netflix users streamed 1 billion hours of video per week. [3]
- Google Translate processed 143 billion words per day in 2016, in 100 languages. [4]
- Wikipedia users publish 600 new page edits per minute.
- Total worldwide data will swell to 163 Zettabytes (ZB – that is a 1 followed by 21 zeros) by 2025, one order of magnitude higher than it is today. Most of the data (60 percent) will be generated by enterprises, and 20 percent of it will be critical to people's daily lives. [5]

Now, these numbers can seem a bit foreign to our industry, especially as many of them refer to "data" and not words. Not all this data will be text-based, of course. But it is safe to assume that the data that will be "critical to people's daily lives" will be verbalized and, necessarily, translated. In any case, these numbers are solely to put into context the immense growth in content and the inescapable nature of the market that will cover this need for translation: It will be **Fast** and it will be **Cheap.**

## The age of comfort

On the flip side of the coin – leaving the realm of the theoretical – we have the actual professional practitioners that are surrounding all this content. It is crucial to understand that we are still working with people (thankfully), and that their decision to work with you or not will ultimately boil down to one thing: their comfort. Your client contacts want to be comfortable, they want to be making the right decision when they buy your services. Their bosses, procurement, accountants and management want to be comfortable: They want the process to go well and to deliver their own services or products within budget and on time.

As language service providers, we can cater to the comfort of our clients if we understand that it is articulated, just as the overall trends we reviewed, in terms of **Speed, Cost** and **Quality.**

### Speed

Fast means that our point of contact (POC) is happy because they can meet the fast pace set by their direct supervisor < business unit lead < management < market < end user.

But how fast is fast? It is almost impossible to estimate an average turnaround time across the industry. There is no hard data to go by besides what is being advertised, which ranges from 60-minute turnarounds based on crowdsourced solutions, Netflix and their 48-hour complete localization cycle, to more traditional per-project estimates. Speed is being redefined with each new technological milestone and all players are forced to keep up. In any case, speed is an easily measurable factor and we can *simply define "fast" as "faster than the competition"* or *"well within the buyer's timeline".*

### Cost

Cheap means our POC is happy because they don't have to justify every detail of the expense or navigate the budgeting constraints of their unit < department < management < end user (who will not think twice about shifting to the competition's better price point).

But how cheap is cheap? It really depends on who you're competing with. For general competition, in the U.S., a 2016 article from Slator found the average translation rate per word to be US$0.21. [6] In Germany, that number was € 0.15. [7] So, cheap is anything cheaper than those industry averages, and of course, within budget. It must be said that cheap isn't always within budget, and vice versa. This factor is more difficult to define than speed, although it is also easily measurable.

### Quality

Finally, quality is the only factor without a *direct* impact on our POC's happiness. Rather, its impact is indirect: Good quality means our POC is happy because they avoid negative feedback from their reviewers or from the end users after the service/product goes live, and the dip in customer satisfaction and revenue this entails (or used to entail). But mostly, good quality equals comfort because it avoids rework (preventing delays and additional cost). Industry research lists rework as one of the main reasons for a translation buyer to drop their translation provider. It is therefore evident that quality becomes important insofar as it affects speed and cost.

Bearing this in mind, our initial question "How good is good enough?" takes on a less optimistic tone. Of the three cornerstones of comfort, quality is clearly the most difficult factor to measure. Also, with comfort as the ultimate value, it is easy to see how quality just has to be good enough to avoid the negative impacts of slower speed and higher cost.

## The fast-foodifying of translation

If you ignore the idea of quality for the sake of quality, and remember that we are working with people, you can ask "What makes them happy?" And you might conclude, as we did, that "good enough" is the minimum level of quality needed to ensure the comfort of all the parties involved in the process. But that still leaves some variation on what the minimum threshold is. And it isn't clear who makes that decision.

Is it the…

- **End users:** They decide on quality indirectly, through the purchasing decisions of the collective. Their vote is cast in the form of dollars, clicks, views, time per page, and attention. But do end users care about quality anymore? For them, a translation either "flies or does not fly".
- **Clients:** They decide on quality directly, by what they are willing to buy. In the "good enough" culture, comfort is the supreme value. The email exchange we described justifies this very controversial question: Do they care about quality anymore?
- **Translation providers:** We decide on quality directly, by what we are willing to offer.

Until now, we have neglected this responsibility as an industry. If every stakeholder is happy, then it's "good enough". And this shouldn't be too alarming, if it weren't for the fact that the quality threshold seems to be decreasing by the minute, due to what we call the *fast-foodifying of translation.*

The term "fast-foodifying" is useful in this context because the fast food industry is a clear example of an industry at the service of comfort. With comfort as the driving goal, we describe the "fast-foodifying" of our own industry through three distinct trends:

- The separation from the original purpose of the occupation and the incursion into tech. This transition has been a clear trend with the biggest LSPs in the industry, most of whom own and commercialize proprietary translation management systems. Today, technology in our industry is much less likely to replace the doers (translators) than it is to replace the coordinators (project managers).
- A decrease in average project size, as well as the shelf-life of translations. The former benefits speed-centric models built around automatization of the management process and the latter relieves the burden of quality.
- "Would you like fries with that?" We are noticing lower and lower per word rates, made possible by crowdsourcing, machine translation (MT) + post-editing (PE), and TM leveraging – regardless of the quality of the TMs. These do not include additional services, which were traditionally a part of an all-inclusive rate (file preparation, editing, review, etc.).

These three trends build on the realization, by LSPs, that the content creator and the end user don't care about translation, they want information ("good enough"). And they have given rise to a business model that takes the decision-making

out of the hands of the practitioners and into the hands of the market. The cornerstone of this business model is the "levels of service" approach, which sees small and medium LSPs atomizing their services into an ever-increasing number of categories with ever-decreasing levels of quality.

There have always been implicit quality expectations associated with different types of projects, degrees of visibility, target audience, regulatory compliance, etc. A good example of this is the difference between pre-sale and post-sale content, where quality is valued higher in the pre-sale scenario, as it has a direct impact on revenue, whereas post-sale documentation such as maintenance manuals typically does not produce any additional revenue. On the LSP side, these differing quality expectations traditionally had matching levels of service "disguised" under acronyms such as TEP, TE, MT+PE, etc. Or simply under the assumption that client review will become a billable item rather than a free fix.

But this model of implicit quality expectations has given way to explicitly stated levels of quality that clients can choose from, at differing price points. We see this simply as a response to the "fast-foodifying" of our industry, which inevitably encourages the industrialization of every player in the chain, including the suppliers to big LSPs and their competitors.

If quality is the one resource we share as an industry, as well as a crucial element in the control over our profession and the conditions under which we work, then the levels-of-service approach is undermining our credibility as the guarantors of said resource, and is de-professionalizing our industry.

## Looking into the future

The truth is, there **IS** one level of service that would cover any of the translation needs in the market: the best quality. We can all agree that the perfect translation would certainly fit any purpose and make all stakeholders happy. It would also serve the language itself, the professionalization of our industry, and the shielding of working conditions. However, it is not always possible to provide this level of quality as it comes at the expense of speed and cost. This is where disruptors play a crucial role.

Each industry needs disruptors to keep innovating. Disruptors evaluate typical processes and identify bottlenecks, redundancies or inefficiencies. By using a non-traditional approach to content management, they can offer tailored solutions and "square" the traditional triangle of SCQ. But in order to disrupt, you need an understanding of what you are disrupting and if you are adding value or not. The industry has seen a dramatic increase in mergers, consolidation and acquisition of small and medium LSPs by players from other industries, especially finance. This is not the kind of disruption we need, as it is not people-focused, it doesn't treat languages as the extension of cultures, and it treats all content alike. We, the practitioners, should reclaim our industry by setting our own quality standards and erasing the term "good enough" from our playbooks.

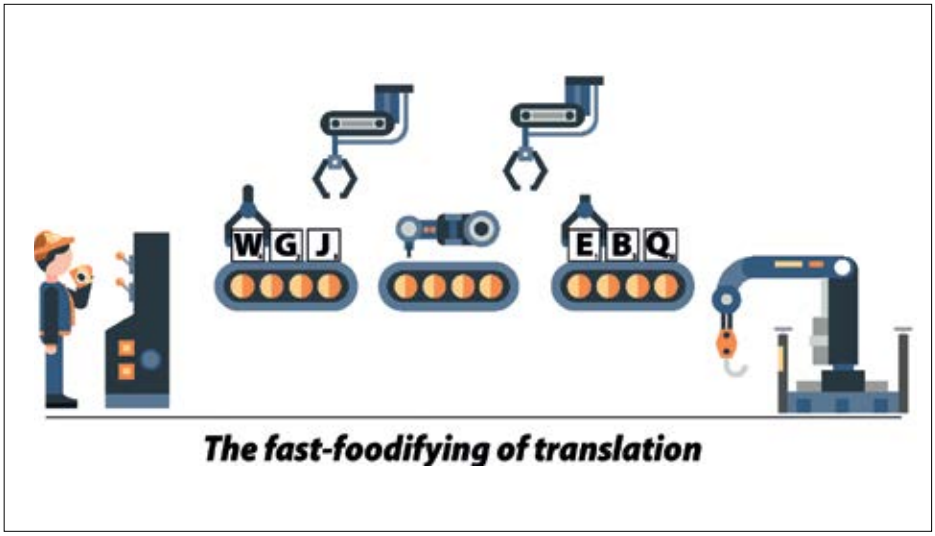


*Image: When global content meets mass production* *© macrovector/freepik.com*

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## ABOUT THE AUTHORS

**Burckhardt Rueffer** is the CEO and co-founder of BeatBabel. After spending many years on both sides of the great divide (geographically and professionally on the buyer and supplier side of translation services) he moved from his native Germany to California and co-founded BeatBabel to follow his passion for languages and the communication industry.

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**Miguel Sevener** – a biology graduate turned translator – decided he would rather be a translator with research skills than a scientist with language skills. He joined BeatBabel in 2014 and has spent the past years growing into management responsibilities and attending industry conferences as an active speaker all around the globe. Miguel is currently taking some time off in Spain and is focusing on writing and making music.

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# A superpower called empathy

*"When you show deep empathy toward others, their defensive energy goes down, and positive energy replaces it. That's when you can get more creative in solving problems."*

*— Stephen Covey —*

Text by Prarthana Ajith

Image: © ImagineGolf/istockphoto.com

Legend has it that a long time ago, villagers in the Solomon Islands followed a unique method for felling trees. If a tree was too large to be axed, woodsmen with special powers would creep in on the tree at the break of dawn, and scream at the top of their lungs and curse the tree. They would continue to do this for a period of thirty days, at the end of which the tree would supposedly die and fall over. The concept behind this act was that all the hollering and cursing would kill the spirit of the tree. While we won't find any proof to the truth of this legend, the message that it carries is profound. What is it that causes humans to fall over like a cursed tree? The answer is apathy. Known to cause the highest distress levels in human beings, apathy is what prevents them from being able to give their best in what they do.

## Living life to its fullest

Empathy, on the other hand, is the salve to the human spirit that is ravaged by apathy. By simple definition, empathy is the ability to put yourself aside in any situation, and give the benefit of your perspective to the other party concerned. By displaying this very simple, albeit powerful attribute called empathy, you can ease yourself and those around you into living the most real, authentic lives. Empathy is possibly the most important of all the attributes that humans can possess.

It is only when humans lead a life that is governed by their own uniqueness and passion that they can give their best in what they do. However,

humans are social beings who seek emotional validation from the people that they deem important, for example, family, co-workers, and managers. They struggle hard to reprogram their beliefs and the conclusions that they have drawn about themselves and their life's limitations. This is why empathy takes a very important position in their decision-making at work, and in life itself.

Research has confirmed that empathy in the workplace has the capacity to build an environment of trust and engagement among employees which, in turn, leads to increased productivity, success, and profits for the organization. In his book *Wired to Care,* Dev Patnaik talks about how all types of organizations prosper when they tap into this power that all of us already have – the ability to reach outside of ourselves and connect with other people. When people inside a company develop a shared sense of what is going on in the world around them, they seek new opportunities faster than their competitors. They have the courage to take risks doing something new, and the conviction to stick with an idea that may not take off immediately.

Organizations that are led in an empathic manner reveal a structure that is totally different from those that are run in a hierarchical way. A sense of enhanced participation by the employees facilitates their efficiency, growth, and success. There is no way to separate collaboration from business processes, and this is why empathy is definitely going to be an intrinsic motivator for a long time to come.

## Hierarchical vs. empathic culture

Organizations and corporations are living systems. Humans have lived in a dominating hierarchical structure for more than 3000 years, so the systems we apply to our workplace have come to mirror this. Over the years, archaic organizational policies and cultures driven by industrialization have spilled over to knowledge-based and technological setups. Research states that just one in ten professionals is engaged in their job. For most employees, work has become a mere transaction, and no longer a passion.

Even in highly organized ecosystems, there is an ever-increasing mental health crisis. In other cases, while people are emotionally driven, technology is fueling an empathy deficit. The advent of social media has led people to constantly question their self-worth and enhanced the desperate need to fit in. Online communication, rather than in-person communication, has made us lose the sharpness of collaboration and the spontaneity of creativity and ideas. And this is why being empathic to the people and environment around you has become the need of the hour!

## Empathy is a muscle that needs to be trained

All your actions are in the service of your own needs. You constantly seek to measure the impact of your work on yourself, your family, stakeholders, customers, and the world in general. This impact can only be measured qualitatively when you make a journey towards leading an empathic life.

## Show some self-love!

Have you seen how entrepreneurs are motivated to kick off a new venture by nothing more than a gritty vision? They have risk-taking abilities and the perseverance to carry through what they set out to achieve. They may fail sometimes, but choose to pick themselves up and surge ahead every single time. Driven by their passion to succeed, they focus on honing strong relationships with the people who build and sell their products. Appreciating themselves for business wins comes as easily as appreciating the efforts of the people they work with. Most times, they decide to walk in the shoes of their customers in an effort to understand the depth of the problems they face. They constantly seek feedback from customers to refine their products and services.

Now ask yourself these questions:

- Are these not the very values that you need to achieve the best results at work?
- If yes, then how can you keep the entrepreneur inside yourself alive while being a non-entrepreneur?

The answer is simple: by opting to keep your humanity and empathy intact. Here is the principle you must live by: Choose to choose yourself, to make your work work for you!

## Interpersonal empathy

Dealing with people at work may turn out to be difficult at times, given that humans are prone to judgment. What makes it harder is that the people around us may come from diverse backgrounds, cultures, and belief systems.

Just how can you put empathy to use in such situations?

- **Put aside your viewpoint, and try to see things from the other person's point of view.** When you do this, you will realize that other people most likely are not being evil, unkind, stubborn, or unreasonable. They are probably just reacting to the situation according to their prior knowledge and experience.
- **Validate the other person's perspective.** Once you see why others believe what they believe, acknowledge it. Remember that acknowledgment does not always equal agreement. You can accept that people have different opinions from your own, and that they may have good reason to hold those opinions.
- **Examine your attitude.** Are you more concerned with getting your way, winning, or being right? Or is your priority to find a solution, build relationships, and accept others? Without an open mind and attitude, you probably will not have enough room for empathy.
- **Listen.** Listen to the entire message that the other person is trying to communicate. Listen with your ears, eyes, heart, and instincts. When in doubt, ask the person to explain his position. This is probably the simplest and most direct way to understand the other person. However, it is probably the least used way to develop empathy.

Practice these skills when you interact with people. You will more likely appear caring and approachable, simply because you increase your interest in what others think, feel, and experience. It is a great gift to be willing and able to see the world from a variety of perspectives, and it is a gift that you can use all the time, in any situation.

## Organizational empathy

Research findings strongly suggest that the secret ingredient to a company's success is empathy. There can be no innovation without change, and change comes only from

thoughts that are way different from what your experiences have been to date. Empathy helps employees to take risks, to collaborate, and to move through change effectively.

To achieve this:

- Place people over processes! Make small and simple "empathy nudges" to reshape the company culture. For example, set up clubs that may drive the alternative interests of employees, such as sports, music, movies, or languages.
- Drive the values of empowerment, authenticity, growth, and belonging across the company. Treat people as a whole and not as units of production.
- Encourage open, two-way communication with the idea of creating peace in the organization. Accept and consider working through the constructive criticism provided by employees.
- Focus on being transparent about business needs and, in turn, drive a sense of shared purpose across the company. Remember that employees, once engaged to a shared purpose, tend to give their best. Make people feel that they are not here just to make a living, but to build a more abundant world for themselves and others.
- Silence endless debates about whether flexible arrangements can work or not. Technology has made work across time and space possible so that we can bring home and work together.
- Work on creating employee-driven policies that inspire diversity and inclusion.
- Create a forgiving environment allowing employees to make mistakes. Remember that the learning that comes out of those mistakes is vital to the growth of the business.

## Case studies on empathy

The most empathic companies are known to outperform those that demonstrate the lowest levels of empathy by 50 percent.

Satya Nadella, CEO of Microsoft, facilitated the transformation of the mindset of Microsoft and its people from ego to empathy. This amendment was responsible for bringing the company out of impending doom, and also significantly increasing its market value. About what brought about this change, Nadella said, "Our core business is connected with the customers' needs and we will not be able to satisfy them if we don't have a deep sense of empathy."

Michael Ventura, CEO of the award-winning agency Sub Rosa, worked with General Electric (GE) to create a space for women to share their experiences and fears about going to mammography appointments. Through the power of empathy, they were able to solve this intimate issue for women.

For some businesses, empathy-driven customer initiatives provide the foundation for their own internal policies. At Cariloop, a company that creates a support platform for caregivers, empathy is already integrated into its business model. The company's health care coaches routinely spend hours speaking with its members. Jason Osburn, the company's chief empathy officer, makes a habit of sitting in on these calls and taking notes. He regularly works with his sales team to understand their users' journey and what their goals and desires are, and to get a sense of what their audience wants. This entire approach is taken with an empathic design mindset, to work to create moments for the coach where he can be the hero and the users can make good on their goals and desires.

In other cases, businesses demonstrate empathy in the form of a robust policy or benefit. Market research indicates that the majority of employees define traditional benefits like health insurance and paid parental leave as empathic. Some companies like Southwest Airlines go even further. A non-profit organization within the company provides financial support to employees who have experienced severe hardships, such as natural disasters, in their lives. Voluntary contributions are automatically deducted from the salaries of participant workers, collecting several million dollars in aid.

A competitive benefits package is one of the keys to attracting new talent and retaining available talent. It is seen that employees respond most positively to empathic policies like Southwest's, the kind where health and financial wellness are balanced with affordability. It is recommended to leaders that they review each generation in the workforce and ask this pertinent question: *How do I align my benefits program and strategy with what the employee really wants?* If this had to happen in a proactive, rather than a reactive manner, it would be a great way to engage the current workforce as well as the upcoming talent pool.

Leaders and employees are divided on whether AI can make an organization more empathic. Jared Feldman, founder of Canvs AI, is frank about the strengths and weaknesses of AI. Where AI does well at tasks that are scientific in nature, it struggles with distinctly human qualities such as emotion and creativity. In his opinion, rather than automating workers into obsolescence, it may ultimately end up only making their jobs easier. The company, which measures an audience's emotional responses to brands, advertising, and entertainment, has also worked to develop an empathy-driven culture defined by transparency and rationality. Here, each new task is paired with an explanation of why it is being assigned. The employees are treated as full participants in the company's mission, with workers and managers placed on a level playing field.

All these cases prove that empathy is not just a passing fad – it is a lifestyle that you must live and inspire the people around you to live by. In a highly disruptive world, change has become the new normal and problems have become increasingly challenging. To solve them in the most effective way, taking all perspectives into account is a necessity. With empathy, you can even come up with a hybrid of different solutions that can solve even the most complex problems in your organization.

## Conclusion

The poet and civil rights activist Maya Angelou once said, "I think we all have empathy. We may not have enough courage to display it."

Traditionally, empathy was considered a sign of weakness. While a leader's job was to make decisions, everybody else was expected to go along with them. As businesses evolve towards a collaborative approach at workplaces, it is time to come out of your empathy closets and realize empathy's true strength. Each one of you should be able to show up at work as your most authentic self and feel safe and comfortable. It is only then that you can be committed to building well-designed products and services that the world will love to use!


### ABOUT THE AUTHOR

**Prarthana Ajith** currently manages the Information Engineering team at Micro Focus. She has over 14 years of experience in writing for hardware, storage, and software automation products. The science behind human behavior is a subject that has never ceased to intrigue her. She believes that a little bit of kindness in all that you say and do can go a long way in making the world a much better place!

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# A match made in Amsterdam:
## TAUS' new "hi-fi" translation data service

Six years ago in 2013, a Dutch government funded research project was launched in Amsterdam under the leadership of Professor Khalil Sima'an, a computational linguist at the Institute for Logic, Language and Computation of the University of Amsterdam. Called **DatAptor**, it brought together a team from Intel, the Directorate General of Translation of the European Commission, and TAUS, the translation automation think tank.

The partners set themselves a critical machine translation (MT) goal: How to make it more efficient to immediately select the very best translation data for an MT engine from the vast amount of available content. Three years later, their response emerged as a brand new online service – the TAUS Matching Data solution.

Language data is in demand right across the technology map as machine learning solutions are used for applications such as chatbots, automated report writers, and high-quality transcription.

Most of all, machine translation has been able to leverage the language data contained in "memories" created during the first wave of crowdsourced automation as databases of parallel human translations.

However, the fit between data availability and optimum usability has never been easy.

## The big data-domain fit problem

"Finding language data for MT training has always been a big challenge," says Jaap van der Meer, director of TAUS. "Selecting data for a particular domain was almost impossible. Back in 2010, we began taking an example data set (a simple domain-specific translation memory) to help users compile a personalized corpus from the repository of many billions of segments in the TAUS Data Cloud."

Today, the dramatic arrival of neural MT has made it even more necessary to prime the machine with selected data. But the problem has been how to automatically select the "high-fidelity" or in-domain data to closely match your document's source language style?

## Mini-corpus as query term

Using DatAptor, the task is remarkably simple. You create a mini-corpus of segments that typify your domain in your source language (say 20,000 data segments on oil drilling) and use it as the "query term" to search a big data repository. This will then select high-fidelity candidates of in-domain segments from any parallel corpora in the repository. All you need is a smart way to access lots of data!

As Khalil Sima'an explains: "Our dream was to make the World Wide Web itself the source of all data selections." But this would have been overly ambitious. So, the team decided to prove the concept on a smaller dataset – the best multiple-domain data collection of translation data the new – TAUS's own data repository.

This collection of parallel corpora from the language services industry has been accumulating since 2007, and by 2013 had almost 70 billion words in 220 language combinations across indexed domain types for easier searching.

## Improving segment matches

By closely examining corpora associated with given domains, the team also learned that each domain is in fact a mixture of many subdomains. This means that by making metrics of combinations of segments across all subdomains in a very large repository, you can open up a wealth of new, untapped selections. In other words: better matching of segments.

So, if the user provides a Query Corpus representing their domain of interest, the **Matching Data** method (as it has now been called) will find the most suitable selection in the repository.

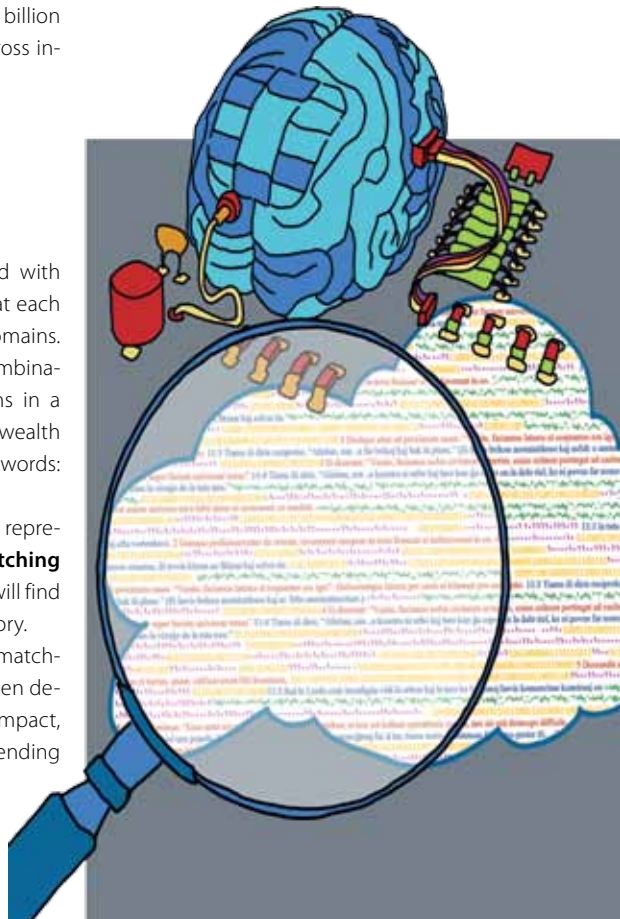
Moreover, this can be improved by using matching scores for each segment. Users can then decide whether they want to download compact, medium or large selections of data, depending on their needs.

## Successful road-test

To road-test Matching Data, the team ran a trial with Oracle International Product Solutions by developing a colloquial corpus for general online conversations and chats, between English and Chinese, Korean, Japanese, Spanish and Brazilian Portuguese.

Oracle's average quality score on the segments found through the Matching Data process revealed a satisfying 84 percent. DatAptor proved to be a highly successful partnership between research and industry, delivering on its promise and successfully transmuting the outcomes into a new service – the **TAUS Matching Data** service, which went live at the beginning of 2019.

Check it out on www.tausdata.org, and join in the ongoing effort to use, develop, finetune and improve on matching data provision for the industry as a whole.



# events

tcworld 2019

## Information Energy 2019

April 11-12, 2019
Amsterdam, Netherlands
www.informationenergy.org

## MadWorld 2019

April 14-17, 2019
San Diego, CA, USA
www.madcapsoftware.com/conference

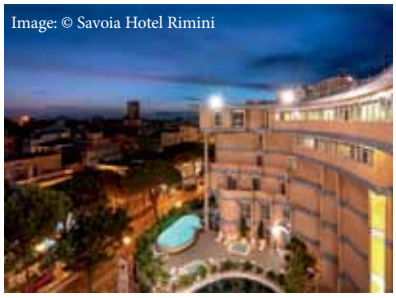
## TAUS Global Content Summit

April 30, 2019
Istanbul, Turkey
www.taus.net

## COMTecnica 2019

Rimini, Italy
May 7-8, 2019
https://comtecnica.it

Making information intelligent is one of the key aspects in the time of Industry 4.0 and the Internet of Things (IoT). Companies face many challenges while adapting to these new requirements. The main topics of COMTechnica 2019 are: Processes and technologies in TC and Intelligent Information, with a particular focus on the latest trends and most pressing needs.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## UA Reloaded

May 15-16, 2019
St. Leon-Rot, Germany
https://ua-reloaded.de

## tcworld China 2019

May 30-31, 2019
Shanghai, China
https://tcworld-china.cn


Image: © dk1234/istockphoto.com

tcworld China is the premier gathering event for all decision-makers and specialists in the field of technical communication in China. At tcworld China 2019, local and international TC experts will share their experiences, best practices and solutions for China-specific challenges, and exchange the latest information in the technical communication industry.


Image: © Tina Douva/istockphoto.com

## Evolution of TC

June 4-5, 2019
Sofia, Bulgaria
https://evolution-of-tc.com

Evolution of TC is the annual gathering event for all technical communicators with a focus on innovations in software documentation. It takes place in Sofia and represents the only technical communication conference in Southeastern Europe.

## LocWorld40

June 11-13, 2019
Estoril Coast, Portugal
https://locworld.com/events/locworld40-portugal-2019

## TAUS CEO Forum

June 25-26, 2019
Salt Lake City, UT, USA
www.taus.net

## Content Marketing World 2019

September 3-6, 2019
Cleveland, OH, USA
https://contentmarketinginstitute.com

## NORDIC TechKomm 2019

September 25-26, 2019
Copenhagen, Denmark
https://nordic-techkomm.com

## tcworld conference 2019

November 12-14, 2019
Stuttgart, Germany
http://conferences.tekom.de

## Expolingua

November 22-23, 2019
Berlin, Germany
www.expolingua.com

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